

# PSYCHOLOGICAL ABSTRACTS

WALTER S. HUNTER, EDITOR

H. L. ANSBACHER, ASSISTANT EDITOR

BROWN UNIVERSITY

WITH THE CO-OPERATION OF

F. C. BARTLETT, CAMBRIDGE UNIVERSITY  
†ED. CLAPARÈDE, UNIVERSITY OF GENEVA  
R. KURODA, KEIJO IMPERIAL UNIVERSITY  
R. NIHARD, UNIVERSITY OF LIÈGE  
V. OSIPOV, LENINGRAD

H. PIÉRON, SORBONNE  
M. PONZO, UNIVERSITY OF ROME  
P. RANSCHBURG, UNIVERSITY OF BUDAPEST  
M. L. REYMERT, MOOSEHEART, ILL.  
C. F. WU, ACADEMIA SINICA

## CONTENTS

General (incl. Statistics).....	2041-2089
Nervous System.....	2090-2103
Receptive and Perceptual Processes.....	2104-2127
Learning, Conditioning, Intelligence (incl. Attention, Thought).....	2128-2149
Motor and Glandular Responses (incl. Emotion, Sleep).....	2150-2172
Psychoanalysis, Dreams, Hypnosis.....	2173-2187
Functional Disorders.....	2188-2258
Personality and Character.....	2259-2276
General Social Processes (incl. Esthetics).....	2277-2314
Crime and Delinquency.....	2315-2326
Industrial and Personnel Problems.....	2327-2339
Educational Psychology (incl. Vocational Guidance).....	2340-2396
Mental Tests.....	2397-2400
Childhood and Adolescence.....	2401-2438

PUBLISHED MONTHLY, WITH TWO ISSUES DURING DECEMBER, BY  
**THE AMERICAN PSYCHOLOGICAL ASSOCIATION, INC.**

Prince and Lemon Streets, Lancaster, Pa.

*Editorial Office:* BROWN UNIVERSITY, PROVIDENCE, R. I.

*Business Offices:* PRINCE AND LEMON STREETS, LANCASTER, PA., AND NORTHWESTERN UNIVERSITY, EVANSTON, ILL.

**Send changes of address to: Psychological Abstracts, Northwestern University, Evanston, Ill.**

Subscription, \$7.00 per year; Foreign, \$7.25.

Entered as second-class matter July 12, 1937, at the post-office at Lancaster, Pa., under the Act of March 3, 1879

# AUTHOR INDEX

- Abbott, H. R., 2150  
Abernathy, E. R., 2340  
Abrahamsen, D., 2188  
Adinarayanah, S. P., 2277  
Adkins, D. C., 2259  
Adrogué, E., 2189  
Aginsky, B. W., 2064  
Akelaits, A. J. E., 2190  
Allgaier, E., 2334  
Allport, G. W., 2047  
Alpert, H., 2278  
Ames, L. B., 2401  
Anderson, H. H., 2402  
[Anon.], 2279, 2403  
Apperson, S. V., 2341  
Ashley-Montagu, M. F., 2280  
Atkinson, T. G., 2104  
Averill, L. A., 2342  
  
Babitz, M., 2041  
Baer, J. A., 2144  
Baker, E., 2413  
Baker, H. J., 2042  
Baker, H. M., 2315  
Barahal, H. S., 2191  
Barbeau, A., 2242, 2316  
Barnes, R. M., 2327  
Barr, A. S., 2343  
Barrera, S. E., 2217  
Baudouin, G., 2043  
Baudouin, A., 2090  
Beach, F. A., 2091  
Beaglehole, E., 2281  
Benditt, M., 2192  
Bennett, C. C., 2404  
Bennett, M. A., 2151  
Bentley, A. F., 2044, 2045  
Berena, C., 2105  
Bergmann, G., 2046  
Bernard, J., 2128  
Billingslea, F. Y., 2152  
Billa, A. G., 2242  
Bing, R., 2193  
Bingham, H. J., 2344  
Blair, G. M., 2345  
Blanchard, P., 2405  
Blumel, C. S., 2194  
Bongioanni, F. M., 2153  
Böszörményi, G., 2195  
Bowley, J., 2196  
Bray, C. W., 2127  
Bridgman, O., 2406  
Brill, A. A., 2173  
Brintnall, A. K., 2175  
Bromberg, W., 2317  
Bromley, D. D., 2346  
Brookover, W. B., 2347  
Brooks, J., 2141  
Bruch, H., 2407  
Bruner, J. S., 2047  
Bucy, P. C., 2092  
Buel, J., 2154  
Burling, T., 2339  
Burpee, R. H., 2197  
  
Caceres, A. M., 2328, 2329  
Campbell, I. G., 2106  
Carlson, A. J., 2048  
Carmichael, L., 2155  
Carpenter, C. R., 2282  
Carr, L. J., 2408  
Carroll, D., 2318  
  
Casamajor, L., 2093  
Case, H. W., 2175  
Case, T. J., 2092  
Cassidy, J. H., 2319  
Castellano, F., 2174  
Cattell, P., 2397  
Cattell, R. B., 2049  
Chugerman, S., 2050  
Chugunov, S. A., 2100  
Cohen, J. L., 2156  
Compton, R. K., 2348  
Connette, E., 2349  
Constable, K., 2093  
Cornish, E. A., 2051  
Crandall, E. B., 2396  
Cranfield, E., 2339  
Crook, M. N., 2260  
Crozier, W. J., 2107  
Culler, E., 2131  
Curran, F. J., 2409  
Curtis, H. C., 2198  
  
Daniels, E. M., 2199  
Davis, E. B., 2350  
Davis, P. A., 2094  
Delgado, H., 2129  
Dennison, C. P., 2261  
Detrich, J. E., 2351  
Dolch, J., 2052  
Doniselli, C., 2053  
Donner, A. N., 2283  
Dorcu, R. M., 2175  
Douglass, J. W. B., 2130  
Drake, C. A., 2330, 2352  
Dressel, P. L., 2054  
Dwyer, P. S., 2353  
Dysinger, D. W., 2354  
  
Ebert, E. H., 2398  
Eccher, W., 2131  
Epstein, L. J., 2284  
Erickson, E. M., 2176  
Erickson, M. H., 2176  
Erickson, R. W., 2055  
Erickson, S. C., 2056, 2132  
Eschen, C. R. v., 2355  
Estabrooks, G. H., 2285  
Eysenck, H. J., 2262, 2286  
  
Fahey, G. L., 2356  
Fay, P. J., 2320  
Fearing, F., 2133, 2172  
Fedden, R., 2321  
Federn, P., 2177  
Ferre, C. E., 2108  
Finesinger, J. E., 2224  
Finger, F. W., 2157  
Fischer, G. H., 2057  
Fischgold, H., 2090  
Fisher, R. A., 2058  
Fletcher, D. E., 2357  
Ford, R. N., 2287, 2288  
Francisco Beca, M., 2178  
Fraser, R., 2200  
Freeman, C. H., 2230  
Freeman, F. N., 2410  
French, T. M., 2201  
Friedman, H. L., 2411  
Frisch, J. A., 2158  
Fuller, R. C., 2289  
  
Gabel, O. J., 2358  
  
Gales, R. S., 2126  
Galt, W. E., 2148  
Garma, A., 2263  
Gerstmann, J., 2095  
Gesell, A., 2412  
Gibson, E. J., 2134  
Gilbert, R. W., 2128  
Gilhouse, H. C., 2135  
Gilkinson, H., 2359  
Gilliland, A. R., 2290  
Giraud, J. C., 2109  
Godard, R. H., 2059  
Good, C. V., 2360, 2361  
Gordon, B. L., 2110  
Gossard, A. P., 2362  
Grant, D. A., 2136  
Gray, M., 2202  
Gray, M. G., 2228  
Gray, W. S., 2363, 2364  
Green, L., 2137  
Greenacre, P., 2179  
Greenwood, J. A., 2060  
Gregory, W. S., 2354  
Grether, W. F., 2111  
Grossnickle, F. E., 2365  
Guérault, —, 2061  
Gutiérrez-Noriega, C., 2203  
  
Halbron, P., 2090  
Hallowell, A. I., 2264  
Halpern, F., 2204, 2253  
Halstead, W., 2172  
Hammargren, S., 2205  
Harms, E., 2062  
Harrison, R., 2206, 2207  
Hausmann, G., 2063  
Heilpern, E., 2208  
Heltman, H. J., 2209  
Henderson, W., 2064  
Henle, M., 2291  
Henninger, J. M., 2322  
Henry, C. E., 2096  
Hermans, T. G., 2112  
Herriott, F., 2210  
Hertz, M. R., 2413  
Heinard, A., 2211  
Hiller, E. T., 2292  
Hincks, C. M., 2212  
Hinsie, L. E., 2065  
Hobson, B., 2141  
Hogben, L., 2159  
Hollingworth, H. L., 2066  
Hollingworth, L. S., 2066  
Holzinger, K. J., 2067  
Horner, C., 2353  
Horowitz, E. L., 2293  
Humphreys, E. J., 2213  
Hunt, R. C., 2265  
Hunter, W. A., 2113  
Huyck, E. M., 2294  
  
Infeld, H., 2295  
  
Jagerschmidt, P., 2214  
Jahoda, M., 2331  
Janet, J., 2180  
Janet, M., 2332  
Jaros, E., 2253  
Jasper, H., 2099  
Jenkins, W. L., 2114  
Jersild, A. T., 2366  
Johnson, C. S., 2296  
Jones, A. W., 2297  
  
Jones, U. C., 2367  
Jouon, H., 2414  
  
Kamm, B. A., 2215  
Kanner, L., 2415  
Kantor, J. R., 2068  
Kanzler, M., 2216  
Karlin, I. W., 2416  
Karn, H. W., 2237  
Karpman, B., 2323  
Kasarin, J., 2201  
Katzoff, E. T., 2290  
Kawin, E., 2368  
Kehl, R., 2266  
Kelley, D. McG., 2217  
Kennedy, F., 2069  
Kennedy, L., 2416  
Kerschesteiner, M., 2070  
Keys, N., 2041  
Kindall, A. F., 2333  
Kinder, E. F., 2218  
Kindwall, J. A., 2218  
Kitay, P. M., 2298  
Klein, F., 2219  
Klopfer, B., 2417  
Klüver, H., 2115  
Knott, F. R., 2096  
Knower, F. H., 2359  
Koening, R. C., 2369  
Kraines, S. H., 2220  
Krikorian, Y. H., 2071  
Krugman, M., 2267  
Kruse, M., 2160  
Kubie, L. S., 2221  
Kuder, G. F., 2072, 2259  
Kunitz, A., 2418  
Kyrieles, W., 2116  
  
Lamson, E. E., 2370  
Landecker, W. S., 2299  
Lang, T., 2222  
Larsby, H., 2223  
Laslett, H. R., 2350  
Lassen, H., 2117  
Lauer, A. R., 2334  
Lautsch, J., 2120  
Lawrence, M., 2127  
Lawton, G., 2371  
Leblond, C. P., 2161  
Lecavalier, P., 2316  
Leger, G., 2268  
Lewis, D., 2311  
Liddell, J. D., 2081  
Lindemann, E., 2224  
Lindgren, E., 2223  
Lindquist, E. F., 2059  
Lohmeyer, D., 2372  
Long, J. A., 2242  
Long, L., 2419  
Lowenfeld, H., 2269  
Lowry, S. M., 2335  
Lundholm, H., 2225  
Lutz, J., 2226  
  
Mailloux, N., 2242  
Manney, G. C., 2420  
Marcotte, A., 2242  
Marette, F., 2181  
Margulies, H., 2217, 2417  
Marshall, C., 2098  
Martin, P., 2324  
Maude, J., 2118  
Max, L. W., 2073  
  
McFadden, H. B., 2119  
McKay, D. M., 2390  
McKee, B., 2373  
Mead, M., 2300, 2301  
Mérei, F., 2195  
Meyer, A., 2218, 2220  
Meyer, B., 2411  
Meyer, H. I., 2136  
Meyer, J. E., 2227  
Michotte, A., 2074  
Middleton, W. C., 2270, 2320  
Miller, D. C., 2302  
Miller, H. R., 2168  
Minkowski, E., 2271  
Mion, R. V., 2090  
Mira, E., 2162  
Mitchell, C., 2303  
Moore, C. C., 2374  
Moore, M., 2228  
Moreno, J. L., 2304  
Morgan, C., 2229  
Mowrer, O. H., 2138  
Mudd, E. H., 2230  
Mueller, W., 2139  
Müller, H. V., 2120  
Myers, C. S., 2231  
Myers, R. R., 2289  
  
Nielsen, A., 2098  
Nielsen, J. M., 2097  
Nims, L. F., 2098  
Norris, K. E., 2375  
  
Oberndorf, C. P., 2182, 2232  
Ojemann, R. H., 2233, 2372  
O'Neill, H. P., 2376  
Oppenheimer, M. J., 2168  
  
Page, J. D., 2234  
Parney, F. S., 2336  
Pasqualini, R., 2140  
Patterson, R. M., 2235  
Patton, R. A., 2236, 2237  
Paulsen, A., 2421  
Peak, H., 2141  
Peake, N. L., 2377  
Penfield, W., 2099  
Pennington, L. A., 2113  
Pessini, J., 2325  
Peters, C. C., 2305  
Peters, E. F., 2383  
Phillips, G. E., 2422  
Philp, A. J., 2423  
Pickford, R. W., 2238  
Pierce, L. A., 2306  
Piotrowski, Z., 2239  
Pittenger, K., 2240  
Plant, J. S., 2241  
Plessner, H., 2163  
Porje, I., 2205  
Preston, M. G., 2075  
Preston, M. I., 2378  
Prudden, G. H., 2337  
Przyłuski, J., 2307  
  
Rahm, W. E., 2101  
Rand, G., 2108  
Rapaort, D., 2087  
Rashevsky, N., 2308  
Read, K. H., 2424  
Régis, L. M., 2242  
  
Reider, N., 2243  
Reis, H., 2272  
Remmers, H. H., 2373, 2393  
Reyburn, H. A., 2142  
Rich, G. J., 2244  
Richards, T. W., 2425  
Riemer, M. D., 2245, 2273  
Roberts, J. A. F., 2143  
Roff, M., 2076  
Roper, K. L., 2164  
Rose, E. K., 2230  
Rosenheim, F., 2183  
Rosenzweig, E. M., 2309  
Roslow, S., 2379  
Rostand, J., 2165  
Rusinov, V. S., 2100  
Russell, D. H., 2380  
Russell, J. D., 2381  
Ryans, D. G., 2382, 2383  
  
Sachs, H., 2310  
Saetveit, J., 2311  
Salter, M. D., 2274  
Sandson, F., 2384  
Sanfilippo, G., 2166  
Sargant, W., 2200  
Scarff, J. E., 2101  
Scates, D. E., 2077  
Schilder, P., 2246, 2409  
Schmalzried, N. T., 2393  
Schultz, H. J., 2120  
Schultz, J. H., 2121  
Schumacher, F., 2122  
Seashore, C. E., 2311, 2312  
Seward, G. H., 2167  
Seward, J. P., 2167  
Shatzky, J., 2065  
Sherrington, C. S., 2078  
Shuey, H., 2079  
Singeisen, F., 2247  
Smith, J. R., 2093, 2102  
Smith, M. B., 2146  
Smith, M. E., 2426  
Soares de Souza, D., 2184  
Spache, G., 2385  
Spence, K. W., 2046  
Spiegel, E. A., 2168  
Spoerl, D. T., 2427, 2428  
Steckel, H. A., 2248  
Stephens, J. M., 2144  
Stevens, S. S., 2123  
Stevenson, G. S., 2249  
Steyn, J. W. S., 2145  
Stinnet, B. J., 2144  
Stone, C. P., 2146  
Stone, L. J., 2114  
Stott, L. H., 2429, 2430  
Strang, R., 2250  
Stratton, D. C., 2373  
Stroud, J. B., 2386  
Sullivan, H. S., 2251, 2296  
Super, D., 2387  
Symonds, P. M., 2388  
  
Taylor, J. G., 2142  
Thomas, G. J., 2124  
Thompson, J., 2431  
  
Thomsen, A., 2142  
Thorndike, E. L., 2434  
Toman, J., 2108  
Tonsor, C. A., 2142  
Tower, S. S., 2142  
Traxler, W. T., 2142  
Trevorton, M. W., 2142  
Tucker, L. R., 2142  
  
Valavalkar, P., 2142  
Valentiner, H., 2142  
Valentiner, T., 2142  
Van den Arden, 2081  
Van de Water, 2142  
[Various], 2338  
Varvel, W. A., 2142  
Vaughan, W. T., 2142  
Veol, L., 2390  
Voelker, C. H., 2142  
Volkman, J., 2142  
  
Waldman, H., 2142  
Wall, J. A., 2142  
Walker, C. H., 2142  
Wallin, J. E., 2142  
Walton, C. W., 2142  
Walther, E., 2142  
Wandling, A., 2142  
Ward, W. D., 2142  
Warden, C., 2142  
Waring, H., 2142  
Watkin, H., 2142  
Watson, C., 2142  
Watson, M. B., 2142  
Watson, N. A., 2142  
Watson, R. L., 2142  
Weber, A. O., 2142  
Webster, D. E., 2142  
Wechsler, D. E., 2142  
Weidemann, C., 2142  
Weindler, F., 2142  
Weinstein, B., 2142  
Weiss-Frankl, 2142  
Wells, W. R., 2142  
Wever, E. G., 2142  
White, R. W., 2142  
Whitty, C. W., 2142  
Wile, I. S., 2142  
Winslow, C. N., 2142  
Wise, C. A., 2142  
Wittmer, H., 2142  
Wittels, F., 2142  
Wolf, E., 2142  
Wolfe, D., 2142  
Worcester, C., 2142  
Wrenn, C. G., 2142  
Wright, R., 2142  
Wulfeck, W., 2142  
  
Yacorzynski, 2142  
Yakum, C. S., 2142  
Young, F. C., 2142  
Youtz, A. C., 2142  
  
Zangwill, O. L., 2142

# PSYCHOLOGICAL ABSTRACTS

VOL. XV, No. 5

MAY, 1941

## GENERAL

(incl. Statistics)

2041. Babitz, M., & Keys, N. A method for approximating the average inter-correlation coefficient by correlating the parts with the sum of the parts. *Psychometrika*, 1940, 5, 283-288.—It is noted that the average inter-item correlation, which represents the internal consistency of a test, yields a unique estimate of test reliability. A close approximation to this average is given by a formula which requires the correlation of each item with the total score and the standard deviation of each item. The formula is especially useful in those instances where the number of items is small and where the variation in item sigmas should not be neglected.—(Courtesy *Psychometrika*).

2042. Baker, H. J. The fetish of statistics. *J. educ. Res.*, 1941, 34, 458-459.—The author cautions against the frequently improper application or interpretation of statistical results based on the apparent present belief that every paper in education and psychology must have such treatment to make it scientific.—S. W. Fernberger (Pennsylvania).

2043. Bateson, G. Experiments in thinking about observed ethnological material. *Phil. Sci.*, 1941, 8, 53-68.—The author stresses the importance of a combination of loose and strict thinking, of wild analogy followed by sober and exacting criticism. In his own case this habit has been fostered by a mystical feeling that the same sort of laws will be found at work in all fields. For example, the social organization of a New Guinea tribe was found to be comparable with the structure of radially symmetrical animals. Thus a vague hunch derived from another science led the author to make use of the precise formulations of that science so as to think more fruitfully about his own material. He has also found it useful, when confronted by concepts which he is not yet ready to give strict expression, to dub them with brief concrete colloquial terms the very looseness of which serves as a reminder that more work remains to be done. The author contends that if we wish to speed up the advance of science we should accept this dual nature of scientific thought. For example, the Freudian dogmas must now be restated in new and stricter terms; but when this has been done it is to be hoped that psychoanalysts will embark upon "a new and still more fruitful orgy of loose thinking."—R. H. Dotterer (Pennsylvania State College).

2044. Bentley, A. F. The human skin: philosophy's last line of defense. *Phil. Sci.*, 1941, 8, 1-19.—Dualistic philosophers have tended to locate knowledge, so far as they have faced the question,

in some mysterious mind or soul; or else to speak vaguely of it as having its being within the organism, the anatomical boundary of which is the skin. Biology, however, although it may for special purposes study an organism as if alone, does not think of any organism as existing apart from an environment to which it is reacting. Functionally, then, an organism is not bounded by its skin, but rather by its "superfice,"—this being the term used by the author for the boundary of a region in which "organism-environment adjustments of a behavioral type are in progress." Knowledges, as well as other forms of behavior may accordingly be assigned to regions within superfices. Thus "epistemology goes to join alchemy and astrology in the limbo of man's crude endeavors."—R. H. Dotterer (Pennsylvania State College).

2045. Bentley, A. F. The behavioral superfice. *Psychol. Rev.*, 1941, 48, 39-60.—The physiological skin does not suffice as a boundary for demarcation of behavioral phenomena. The name here suggested for the broader transdermal boundary region, required for their adequate description, is the behavioral superfice. It designates the limits, both temporal and spatial, of the region of observably active participants in a behavioral event. It is factually derived. Existing descriptions of behavior do not hold themselves to intradermal localization, and no added accuracy or coherence is achieved by doing so. There is an evident trend, in the newer psychological systems, toward transdermal localizations. Similar viewpoints have been expressed by a wide assortment of writers from James, with his social selves, to Lewin and J. F. Brown, with their vector fields.—A. G. Bills (Cincinnati).

2046. Bergmann, G., & Spence, K. W. Operationism and theory in psychology. *Psychol. Rev.*, 1941, 48, 1-14.—In psychology, as in other sciences, recent methodological analyses have stressed two different aspects of scientific method: the empirical (illustrated by Tolman's approach) and the formal (theoretical) component (exemplified by Hull's work). Enthusiasm for the former has led to illegitimate attacks on methodologically sound theorizing, so that a restatement of the limits of 'operational' analysis is sorely needed. Although operational definition of empirical constructs is essential, it is in the subsequent processes of inductive generalization and in hypothetico-deductive theorizing that the essential explanatory work occurs, and, even at the level of empirical laws, no help can be derived from operationism. On the formal side, the authors discuss the distinction between Hull's use of the 'postulational' and 'hypothetico-deductive' methods and their usual meaning as employed



by theoretical scientists. Hull actually begins with operationally defined terms or experimental variables rather than with formal terms or guesses as to the choice of variables and mathematical relationships between them; it is in the deductive elaboration of the consequences that his method resembles theirs.—*A. G. Bills* (Cincinnati).

2047. Bruner, J. S., & Allport, G. W. **Fifty years of change in American psychology.** *Psychol. Bull.*, 1940, 37, 757-776.—The entire output of the 14 leading psychological journals for every tenth year from 1888 to 1938 was analyzed under 32 rubrics. The rubrics concern primarily the kinds of subjects used, the various fields and techniques of investigation, the various modes of conceptualization, and the methodological issues stressed. Most articles were classified under more than one rubric. The results are presented in the form of percentages of articles falling in each rubric during each decade and are interpreted with reference to the trends during the 50 year period and the "design" of psychology in each decade. It is concluded that the year 1938 presents two alternative courses for the future, psychology for science's sake and psychology for society's sake.—*A. W. Melton* (Missouri).

2048. Carlson, A. J. **Science versus life.** *Science*, 1941, 93, 93-100.—A discussion of the value and meaning of the scientific way of thinking for life, particularly with reference to present world events.—*F. A. Mote, Jr.* (Connecticut).

2049. Cattell, R. B. **General psychology.** Cambridge, Mass.: Sci-Art, 1941. Pp. 624. \$3.50.—This is an introductory text which reflects the influence of William McDougall. The problem of motivation is discussed in terms of "ergs" or innate psychophysical dispositions. Psychoanalysis and conditioned reflexes, for example, are discussed in relation to this concept. The subject matter is arranged under the headings: the abilities of man (intelligence, mental measurement, individual differences); motives; interests and attitudes (their growth and measurement); the relation of mind and body (nervous system and endocrines); temperament and types of constitution; the interaction of heredity and environment; learning and forgetting; the mind at work (thought, imagination, perception, and the sense organs); psychology and life (psychotherapy, applied educational and social); appendix on elementary statistics.—*C. Pfaffmann* (Brown).

2050. Chugerman, S. **Lester F. Ward, the American Aristotle; a summary and interpretation of his sociology.** Durham: Duke Univ. Press, 1939. Pp. xiii + 591. \$5.00.—[Abstracted review; original not seen.] The psychological aspects of Ward's work are considered.—*F. W. Finger* (Brown).

2051. Cornish, E. A. **The analysis of covariance in quasi-factorial designs.** *Ann. Eugen., Camb.*, 1940, 10, 269-279.—This paper treats the application of the analysis of covariance in three types of design, namely, balanced incomplete blocks, quasi-factorial designs, and quasi-Latin squares in randomized blocks. New methods for securing the

sums of products are described, and numerous examples under each method of treatment are given.—*J. W. Dunlap* (Rochester).

2052. Dolch, J. **Aloys Fischers † wissenschaftliches Lebenswerk.** (The scientific life-work of the late Aloys Fischer.) *Z. pädag. Psychol.*, 1940, 41, 157-172.—In commemoration of Fischer's 60th birthday Dolch reviews the development of his thought and activities. He was the founder of descriptive pedagogy, an early worker in the pure science of education, investigator in educational and sociological psychology, promoter of vocational education, a fighter for teacher training, and one of the first advocates of Nazi education. Complete bibliography.—*M. E. Morse* (Baltimore, Md.).

2053. Doniselli, C. **Psicologia sperimentale.** (Experimental psychology.) Milan: Biazzi, 1939. Pp. 248. L. 35.

2054. Dressel, P. L. **Some remarks on the Kuder-Richardson reliability coefficient.** *Psychometrika*, 1940, 5, 305-310.—The Kuder-Richardson reliability coefficient (see XIV: 2729) is derived in a manner independent of that originally given. Various alternative forms applicable to special situations are exhibited with the purpose of making them available to others interested in using this formula. A simplification in computation is suggested for use with a calculating machine.—(Courtesy *Psychometrika*).

2055. Erickson, R. W. **An examination of Professor Edwin G. Boring's system of psychology.** *J. gen. Psychol.*, 1941, 24, 63-79.—Boring's views on several topics are presented and criticised. From the analysis of his statements, it is concluded "that Boring's system is not a coordination of structuralism and behaviorism, but is rather an attack on the former from the standpoint of the latter. He has realized that consciousness cannot be disposed of as cavalierly as the behaviorists do, but his attempts to reduce it to neural events is performed in the true behavioristic spirit and accordingly contains its weaknesses."—*C. N. Cofer* (George Washington).

2056. Erickson, S. C. **Unity in psychology: a survey of some opinions.** *Psychol. Rev.*, 1941, 48, 73-82.—Recently, there has been an attempt to solve an old problem of psychology, that of unity, in a new way. Instead of seeking unity through a common subject matter, as formerly, several theorists have attempted to accomplish it by adopting a universal methodology, such as operationism, postulational method, mathematical approach, etc. But any particular methodology is inadequate to cope with more than one restricted set of problems. What is needed, to achieve unity, is greater emphasis on fundamental theoretical formulations to guide experimental studies and avoid 'pebble-picking.' Each problem of research must be conceived, directed, and interpreted in terms of some fundamental frame of reference.—*A. G. Bills* (Cincinnati).

2057. Fischer, G. H. **E. R. Jaensch zum Gedenken; sein Werk und Vermächtnis.** (In memory of



E. R. Jaensch; his work and legacy.) Leipzig: Barth, 1940. Pp. 74. RM 4.50.

2058. Fisher, R. A. *Statistical theory of estimation*. Calcutta: Calcutta University Press, 1939. Pp. 44.—[Abstracted review; original not seen.] In this monograph Fisher presents the main outlines of his theories on statistical estimation together with illustrative examples. The question of inductive inference is discussed and contrasted with the methods of inverse probability. The criteria for satisfactory estimates are discussed, and the maximal likelihood method is shown to give estimates satisfying these criteria. There is a discussion of the treatment of large sample cases as well as small sample theory, including the uses of ancillary statistics for the recovery of information where no sufficient statistic exist.—*J. W. Dunlap* (Rochester).

2059. Godard, R. H., & Lindquist, E. F. *An empirical study of the effect of heterogeneous within-groups variance upon certain F-tests of significance in analysis of variance*. *Psychometrika*, 1940, 5, 263-274.—In the application of the analysis of variance to data obtained in educational methods-experiments which involve several classes of several schools, one assumption is that of homogeneity in the variances of pupil scores from school to school. It is shown that such variances on representative educational achievement tests are heterogeneous. The effects of this heterogeneity upon the *F*-tests of significance commonly employed in methods-experiments are investigated by comparing the actual distribution of *F* values for a large number of experiments involving marked heterogeneity with a theoretical distribution based on the assumption of homogeneity. Although the findings, which vary somewhat with the type of variance ratio, are not entirely conclusive, they apparently demonstrate that departure from homogeneity does not invalidate the use of the customary *F*-tests for evaluating results of the typical methods of experiment.—(Courtesy *Psychometrika*).

2060. Greenwood, J. A. *The first four moments of a general matching problem*. *Ann. Eugen., Camb.*, 1940, 10, 290-292.—Individuals studying problems of extra-sensory perception often employ a target deck against which another deck of cards are matched. The problem then is to determine the mean, standard deviation, and the third and fourth moments of the percentage of hits. Methods for determining the first two have been determined earlier by Stevens, but Greenwood has determined not only these but also the last two moments. A simple straightforward method of computation is outlined.—*J. W. Dunlap* (Rochester).

2061. Guérault, —. *Etendue et psychologie chez Malebranche*. (Scope of ideas and psychology in Malebranche.) Paris: Les Belles Lettres, 1940. Frs. 20.

2062. Harms, E. *Psychology as an autonomous science*. *J. gen. Psychol.*, 1941, 24, 81-94.—Various problems such as typology, the applications of psychology, the relation of psychology to the general

philosophy of science, and others are discussed from the standpoint of an autonomous psychology. "... the autonomy of any field of experience means its scientific recognition as a region of phenomena which really exist, with qualities belonging only to them alone and of which to make scientific experience must mean to fix their proper characteristic traits and laws." For psychology, this means "acknowledgment of the autonomous existence of mental or psychic phenomena in general" and the rigid interpretation of the fields of the science in these terms. 47 references.—*C. N. Cofer* (George Washington).

2063. Hausmann, G. *Zur Auswertung einiger Hinweise Diltheys auf Fröbel*. (Evaluation of some of Dilthey's references to Fröbel.) *Z. pädag. Psychol.*, 1940, 41, 172-185.—This is a contribution to the centenary of the German kindergarten. Dilthey was the first among his contemporary psychologists to give the leading role, not to intellect, but to feeling and will. He did not clearly recognize that Fröbel could complete and fructify his own views. Hausmann analyzes Dilthey's scattered references to Fröbel and brings out the similarity of their views and their adoption in Nazi education. Pestalozzi recognized intuition as the nucleus of education; but Fröbel worked out its ethical and religious relations. He saw the importance of intuition in play and teaching. Intuition is the common pre-form of all conscious perceptions, thought, and will; "the voice of the blood"; the basis of speech, symbols, myths, art, religion, all creative activities, politics, and leadership.—*M. E. Morse* (Baltimore, Md.).

2064. Henderson, W., & Aginsky, B. W. *A social science field laboratory*. *Amer. sociol. Rev.*, 1941, 6, 41-44.—A field laboratory for workers in all the social sciences, including psychology, has been established in a small California community. The population, which includes both Indians and whites of various ethnic groups, is to be studied over a long period from many points of view. It is hoped that advanced scholars as well as students will make use of this new organization.—*I. L. Child* (Harvard).

2065. Hinsie, L. E., & Shatzky, J. *Psychiatric dictionary, with encyclopedic treatment of modern terms*. New York: Oxford, 1940. Pp. 565. \$10.50.

2066. Hollingworth, L. S. *Public addresses*. Lancaster, Pa.: Science Press, 1941. Pp. 148. \$2.00.—Leta S. Hollingworth's reputation as a public speaker was that of being interesting and effective. Among manuscripts left by her over the years 1931 to 1939 are 3 radio addresses, 4 memoranda, and 16 public addresses. The topic of the intellectually gifted child is especially emphasized. Correlated subjects dealt with the early selection and training of leaders, the positive aspect of hereditary strength, and human nature in relation to economics. Other addresses laid stress on the adolescent, character building, sex differences, educational research, psychological service for public schools, the education of handicapped children, the Speyer

School, the new woman, how to keep from becoming an old fogey, and on participation of Nebraska in national leadership. Concrete illustrations gleaned from her rich personal experience with children liberally illustrate most points under discussion. Her photograph is the frontispiece. H. L. Hollingworth presents a foreword.—*M. W. Kuensel* (Children's Home, Cincinnati, O.).

2067. **Holzinger, K. J.** A synthetic approach to factor analysis. *Psychometrika*, 1940, 5, 235-250.—The author considers the various types of factor analysis and points out the desirability of separating the statistical aspects of factor analysis from the theories in a particular field. "It is then possible to set forth clearly the properties of each of the preferred types of solution, and statistical criteria leading to a choice of form and method." A discussion of such types and standards is given.—*G. F. J. Lehner* (Miami).

2068. **Kantor, J. R.** Current trends in psychological theory. *Psychol. Bull.*, 1941, 38, 29-65.—The author reviews the theoretical implications for psychology of the following scientific developments: (1) field theory, (2) operationism, (3) numeralization (especially psychometrics), (4) semantics, (5) symbolic logic, (6) psychomathematical theory, (7) physical analogism, and (8) psychoneurology. In each case the contributions of psychologists are given special attention. The author doubts whether the present situation in theoretical psychology calls for an extreme optimism. 120 references.—*A. W. Melton* (Missouri).

2069. **Kennedy, F.** Science, civilization and faith. *Trans. Amer. neurol. Ass.*, 1940, 66, 1-9.—In his presidential address the author discusses the trend toward arid professionalism in science, the growth of intellectuality at the expense of heart, and the need of union of science with philosophy.—*M. E. Morse* (Baltimore, Md.).

2070. **Kerschensteiner, M.** Georg Kerschensteiner. Munich-Berlin: Oldenbourg, 1939. Pp. 208. RM 4.80.—[Abstracted review; original not seen.] This life history by his wife is designed to illuminate the personality of the educator, school official, and scientist Kerschensteiner. Much new material on his life and activities is brought out, and excerpts from his diaries and letters are included.—*M. E. Morse* (Baltimore, Md.).

2071. **Krikorian, Y. H.** Meaning as behavior. *Phil. Sci.*, 1941, 8, 83-88.—All meanings have relation to mind; and, since mind is not observable except as behavior, meaning may be said to be behavior, in the sense that it is response not only to the immediacy of the stimulus but to what the stimulus stands for. Meaning may be characterized as anticipatory response. In developing this conception 4 points are emphasized. (1) The anticipated result functions as a controlling factor in present behavior. This future reference need not, however, be given an introspective interpretation. (2) Anticipatory response is suppositional; i.e., it involves readiness to act in relation to some object.

(3) Anticipatory response is operational. Thus the meaning of an object is the anticipated operation involved in that type of object; the meaning of an idea is a possible operation or experiment. (4) Anticipatory response is communicative. For example, a gesture made by an organism has meaning if it indicates to another organism the subsequent behavior of the given organism.—*R. H. Dotterer* (Pennsylvania State College).

2072. **Kuder, G. F.** [Ed.] Educational and psychological measurement. Chicago: Science Research Associates, 1700 Prairie Avenue. Vol. 1, No. 1, January, 1941. Quarterly. \$4.00 per year.

2073. **Max, L. W.** A vacuum-tube oscillator for frequency calibration of electroencephalographic and electromyographic records. *J. gen. Psychol.*, 1941, 24, 225-226.—*C. N. Cofer* (George Washington).

2074. **Michotte, A.** La psychologie expérimentale et le problème des aptitudes. (Experimental psychology and the problem of aptitudes.) In Various, *Mélanges Pierre Janet*. Paris: Editions d'Artrey, 1939. Pp. 155-167.—There is at present a definite cleavage between the fields of experimental and of aptitude psychology, the representatives of each school tending to ignore the findings of the other. For example, the majority of textbooks in experimental psychology systematically fail to treat the subjects of personality and measurement of aptitudes, subjects which form the core of the material found in individual and differential psychology. Individual differences, however, cannot be explained by the classic data found in general psychology, and aptitudes are not the result of combinations of the elementary functions described in experimental psychology but constitute a new fact. As such, the new data should become a part of experimental psychology as should also the new method used, i.e., the method of tests, which has recently been perfected by the use of factor analysis. The cleavage is mainly one of perspective, and the present-day concept of experimental psychology as the study of behavior affords an approach to the viewpoint of factor analysis. Both fields have the same object, that is, knowledge of man's capacities in relation to his behavior.—*C. Nony* (Sorbonne).

2075. **Preston, M. G.** Concerning the determination of trait variability. *Psychometrika*, 1940, 5, 275-281.—An analytic technique for the study of trait variability is presented. An expression for the average variance from test to test and an expression for the variance of these variances are derived in terms of the number of tests and the intercorrelations between them, and limiting cases are examined. The question of the true relationship between the nature of the distribution of test scores in a sample of  $N$  persons and the nature of the distribution of  $n$  traits in a single individual is discussed, and other problems are introduced.—(Courtesy *Psychometrika*).

2076. **Roff, M.** Linear dependence in multiple correlation work. *Psychometrika*, 1940, 5, 295-298.—The problem in multiple correlation work of non-

sense results attributable to linear dependence of variables, which has been discussed by Ragnar Frisch in relation to economic data, is presented from the standpoint of its significance in psychological research. It is shown that a symmetric correlation determinant with unity in the diagonal cells can vanish only when there is a first-order or partial correlation of unity between one pair of the variables. On the basis of this result, it is argued that the problem should be expected to cause less difficulty in the field of psychology than in economics and that psychologists should be able to avoid the pitfall by bringing to bear their knowledge of the variables with which they are working.—(Courtesy *Psychometrika*).

2077. Scates, D. E. Assumptions underlying research data. *J. educ. Res.*, 1940, 34, 241-253.—In the consideration of the sources of error which may occur in research, the author discusses (1) the formulation of the problem; (2) the admission of cases to the study; and (3) the methods of quantification. The formulation of the problem may ask only a single question instead of a number of proper questions; it may ask the question in far too simple a form; or the trait or class of objects which it is desired to study may not be homogeneous. For the selection of cases, the author warns against heterogeneity, biased cases, and overemphasis of sampling error theory. Assumptions for the choice of methods for statistical treatment of the data obtained are noted. (4) One may not be investigating all of the important aspects of the problem as assumed. A 5th source of error may be that the problem is formulated in such a way that it will serve certain purposes.—S. W. Fernberger (Pennsylvania).

2078. Sherrington, C. S. *Man on his nature*. New York; Cambridge, Eng.: Macmillan; University Press, 1941. Pp. 413. \$3.75.—The author develops his philosophy of science by an historical approach. He begins with the medieval physician Fernel, the first physiologist. Modern scientific facts and concepts are contrasted throughout the book with the medieval notions. The author points out that the distinction between living and non-living is only one of organization. The viruses are examples of an intermediate kind of organization. The physiological mechanisms, like digestion, respiration, and reflexes, are examples of a higher organization. But still higher than all these is mind. "Mind seems to have arisen in connection with the motor act; . . . where motor behavior progressively evolved, mind progressively evolved." "The primary aim, object, and purpose of consciousness is control." Although the mind body problem still exists, the author argues for the acceptance of energy on the one hand, and mind on the other, as a working biological unity, although it is still impossible to describe the "how" of that unity at the present time.—C. Pfaffmann (Brown).

2079. Shuey, H. *A typological approach to the study of human behavior*. (Microfilm.) Ann Arbor,

Mich.: University Microfilms, 1940. Pp. 297. \$3.71.

2080. Tucker, L. R. *A matrix multiplier*. *Psychometrika*, 1940, 5, 289-294.—A machine to expedite matrix multiplication has been developed by modifying the International Business Machines Corporation scoring machine. The principles and operation of the machine are described, and time and accuracy estimates are indicated.—(Courtesy *Psychometrika*).

2081. Van den Arend, G., & Liddell, J. D. *Guide de l'étudiant en psychologie*. (A guide to the student of psychology.) Paris: Vrin, 1939. Pp. 75. Frs. 10.

2082. Van de Water, M. The psychologist's part in the defense program. *Psychol. League J.*, 1941, 4, 28-30, 33.—The membership of the Emergency Committee in Psychology is given, and ways of bringing attention to research projects related to the defense program are indicated. The work of the U. S. Employment Service and of the National Roster of Scientific and Specialized Personnel is described. Classification in the army, morale, the selection and training of aviation pilots, and the care of refugee children are topics receiving the attention of various groups at present. Suggestions for further research are made.—C. N. Cofer (George Washington).

2083. Vaughn, J. *Psychology in the laboratory*. *J. gen. Psychol.*, 1941, 24, 135-143.—The author attempts to present "trends toward agreement on the nature of the experiments to be performed" in an elementary course in experimental psychology. 23 manuals which had been published in or prior to 1933, and 3 recent manuals were examined. The experiments found in the manuals were classified according to problem or subject of study. The topics receiving the greatest emphasis in the first 23 manuals were sensation, perception, higher mental processes, learning, and efficiency. A list of experiments described in 5 or more of these manuals is presented. Another list, of the experiments in the 3 later manuals, shows "a tendency toward a greater variety of experiments or a broader program with more emphasis on learning and social psychology."—C. N. Cofer (George Washington).

2084. Watkin, H. The psychologist's role in the national emergency. *Psychol. League J.*, 1941, 4, 31-32.—Plans for action by psychologists in the defense program are reviewed, and it is pointed out that they seem to be characterized by the feeling that the war-involvement of the United States is inevitable. Along with a war effort, "democratic ways can and must be preserved."—C. N. Cofer (George Washington).

2085. Watson, G. *Work in the field of psychology in the USSR during 1938*. *J. gen. Psychol.*, 1941, 24, 163-171.—The principles on which Soviet psychology bases its work and the practical nature of much of the psychological research done are described. Problems that were under investigation by the State Institute of Psychology in 1938 included reasoning, memory, habit formation, art, will,



character, the development of higher mental processes, observation, the material substratum of mental life, and the history of psychology. A number of other topics being investigated elsewhere in the USSR are listed.—*C. N. Cofer* (George Washington).

2086. **Watson, R. I.** *The content of experimental manuals in psychology.* *J. gen. Psychol.*, 1941, 24, 183-194.—10 manuals for courses in experimental psychology, which were written in English within the past 15 years and which satisfied certain other criteria, were examined for content. 50 problems treated in 4 or more of the manuals are listed. Also presented is the number of these 50 problems which is omitted from each manual. It is evident that there is much variation in what is thought to be appropriate to the undergraduate course in experimental psychology. A list is also presented of the instruments for experiments suggested for use by 3 or more of the manuals. Variation in emphasis on problems included is indicated by different percentages of space devoted to them in the several manuals. A list of 32 manuals constitutes the bibliography.—*C. N. Cofer* (George Washington).

2087. **Weber, A. O., & Rapaport, D.** *Teleology and the emotions.* *Phil. Sci.*, 1941, 8, 69-82.—Criticizing an article by M. C. Nahm (see XIV: 833), the authors distinguish 3 meanings of the term teleology. In the first, the descriptive sense, the term is synonymous with purposive; in the second sense it is taken to mean that a goal or end is a determinant of the process by which the end is realized. In the third, or metaphysical sense, this principle is extended to the whole universe. It is contended that Nahm has confused the first and second of these senses. Thus he accuses Cannon of inconsequence because the latter, while writing about the usefulness of emotional reactions, nevertheless fails to come to a teleological theory. It is also maintained that Nahm's attempt to defend teleology by an appeal to James' theory of the emotions is based upon a misunderstanding of James' real position.—*R. H. Dotterer* (Pennsylvania State College).

2088. **Wittels, F.** *In memoriam: Paul Schilder, 1886-1940.* *Psychoanal. Quart.*, 1941, 10, 131-134.—A brief appreciative account is given of Schilder's life and of his many important scientific contributions, which included neurological, psychiatric, psychoanalytic, and philosophical works, and which ranged from observational to theoretical studies.—*M. H. Erickson* (Eloise Hospital).

2089. **Wolffe, D.** *Factor analysis to 1940.* *Psychometr. Monogr.*, 1940, No. 3. Pp. 69.—Factor analysis literature since Dodd's 1928 review (see II: 2648; III: 971) is surveyed "in an attempt to answer, as nontechnically as possible, these questions: (1) What is the reasoning common to the different factor methods? (2) How do the several methods differ from one another? (3) How may factors best be interpreted? (4) What have been the chief results of factor analysis? And (5) What

are the limitations and uses of factor analysis?" An index and a bibliography of 530 titles are appended.—*N. R. Bartlett* (Brown).

[See also abstracts 2110, 2308, 2388.]

## NERVOUS SYSTEM

2090. **Baudouin, A., Halbron, P., Fischgold, H., & Mion, R. Y.** [Electric examination of the occipital region in lesions of the optic paths (changes in the Berger rhythm).] *Bull. Soc. Ophthalm. Paris*, 1939, March, 176 ff.—[Abstracted review; original not seen.] Blindness does not cause Berger's rhythm to disappear; it was preserved in two cases of bilateral lesions of the optic paths without complete blindness, in a case of central bilateral scotoma, in one case of complete blindness, and in two cases of unilateral lesions of the optic paths.—*D. J. Shadd* (Detroit, Mich.).

2091. **Beach, F. A.** *Effects of brain lesions upon running activity in the male rat.* *J. comp. Psychol.*, 1941, 31, 145-179.—Twenty-three adult males were run for 20 days in activity drums yielding reliability coefficients of .95 and over. 9 animals were then deprived of varying amounts of cortical tissue and corpus striatum from the anterior part of the brain while 14 were deprived of varying amounts of the posterior cortex. After 20 days for recuperation, they were given 20 days in the drums. Unoperated rats served to check the influence of the 20 day interval. The activity of normal and operated animals was also measured in an open field situation in terms of the number of six-inch squares crossed in given periods. Anterior and posterior lesions yielded inconsistent results, some animals increasing and some decreasing their activity scores. There was, however, a tendency for anterior lesions to produce more marked increases in activity than did posterior lesions. Rats normally inactive tended to show a greater relative increase in activity after lesions than did those which were quite active in the normal state. Small lesions produced more marked activity increases than did those involving over 30 per cent of the neopallium. Brain injuries tended to increase the number of squares crossed. This effect was greater with anterior than with posterior lesions. Certain differences between the results of this study and of one by Richter and Hawkes are discussed. Extensive bibliography.—*N. L. Munn* (Vanderbilt).

2092. **Bucy, P. C., & Case, T. J.** *An association between homonymous hemianopsia and unilateral absence of alpha waves.* *Trans. Amer. neurol. Ass.*, 1940, 66, 17-20.—Abstract and discussion.

2093. **Casamajor, L., Smith, J. R., Constable, K., & Walter, C. W. P.** *Correlated clinical and electroencephalographic findings in children with focal convulsive seizures.* *Trans. Amer. neurol. Ass.*, 1940, 66, 26-30.—Abstract and discussion.

2094. **Davis, P. A.** *Technique and evaluation of the electroencephalogram.* *J. Neurophysiol.*, 1941, 4, 92-114.—The objectives of this paper are to

describe a standardized EEG technique, to describe and evaluate methods of measurement, to classify fundamental types of EEG activity, and to evaluate the degree of abnormality found in EEG records. Procedure, apparatus, electrode placement, and routine methods of recording are described. Under measurements alpha index, delta index, *Wellenindex*, and frequency-analyzer methods are discussed. Types of waves and patterns of activity are discussed, both for normal and abnormal conditions. An evaluation of the gross aspects of the total record in terms of a five-point rating scale is described.—*D. B. Lindsley (Brown)*.

2095. Gerstmann, J. The phenomenon of body rotation in frontal lobe lesions. *Trans. Amer. neurol. Ass.*, 1940, 66, 38-39.—Abstract and discussion.

2096. Knott, J. R., & Henry, C. E. The conditioning of the blocking of the alpha rhythm of the human electroencephalogram. *J. exp. Psychol.*, 1941, 28, 134-144.—Previous work on the conditioning of the blocking of the alpha rhythm of the EEG did not establish sufficient controls to permit differentiation between sensitization of the previously adapted response to the conditioned stimulus and the response believed to be the CR. To make such differentiation feasible the authors separated the conditioned and unconditioned stimuli by an interval of four seconds in order that full recovery of the alpha rhythm could occur after its response to the unconditioned stimulus and before the conditioned stimulus was presented. A conditioned anticipatory response which was unstable and appeared subject to inhibition of reinforcement appears to have been established. Sensitization of the response to the conditioned stimulus appears to have occurred, and this serves to explain the unorthodox type of conditioning data reported by previous workers. The implications of the conclusion that conditioning of the alpha rhythm can be accepted are discussed.—*H. W. Karn (Pittsburgh)*.

2097. Nielsen, J. M. Dominance of the right occipital lobe. *Trans. Amer. neurol. Ass.*, 1940, 66, 43-45.—Abstract and discussion.

2098. Nims, L. F., Marshall, C., & Nielsen, A. Cerebral dysrhythmias following local freezing of the cerebral cortex. *Trans. Amer. neurol. Ass.*, 1940, 66, 185-186.—Abstract and discussion.

2099. Penfield, W., & Jasper, H. Electroencephalography in focal epilepsy. *Trans. Amer. neurol. Ass.*, 1940, 66, 209-211.—Abstract and discussion.

2100. Rusinov, V. S., & Chugunov, S. A. [Electroencephalogram in man during normal state and in regeneration following trauma.] *Sovetsk. Psikhoneurol.*, 1940, 16, 53-59.

2101. Scarff, J. E., & Rahm, W. E. The human electrocortigram. *Trans. Amer. neurol. Ass.*, 1940, 66, 20-26.—Abstract and discussion.

2102. Smith, J. R. The frequency growth of the human alpha rhythms during normal infancy and childhood. *J. Psychol.*, 1941, 11, 177-198.—Com-

bined serial and cross-sectional data based upon observations on 95 normal children gave results bearing upon the comparative frequency of the central and occipital alpha rhythms from birth to 16 years. The central alpha is present at birth at about 7 cycles per second in the sleep state, whereas at this time the occipital region shows little or no activity. During the first 3-4 months the central alpha becomes increasingly prominent and emerges into the waking sensory-motor patterns. About the end of this period the occipital rhythms appear at 3-4 cycles per second and rapidly increase in frequency. From 1 to 2½ years both rhythms increase rapidly in frequency, the central rhythm leading by about 1 cycle per second, and then slow down as both converge upon a common adult maximum of about 10 cycles per second. The beginning of the occipital rhythm may be correlated with the onset of function of the cortical visual mechanism, and the beginning of the acceleration of the central rhythm at around 1 year may occur at a time when voluntary control of neuro-muscular behavior is established in some degree over its entire cephalocaudal extent.—*F. A. Mole, Jr. (Connecticut)*.

2103. Toman, J. Flicker potentials and the alpha rhythm in man. *J. Neurophysiol.*, 1941, 4, 51-61.—Electroencephalograms were recorded from the back, top, and front of the head in 65 experiments performed with 23 adult males during flicker stimulation. Flicker potentials in response to intermittent stimulation were found in 21 subjects, occurring chiefly in the occipital region although occasionally at the top of the head, and never in the frontal region. All subjects showed some flicker-following potentials in the occipital region at 10 per second stimulation frequency. The amplitude and regularity were optimum at the frequency of the alpha rhythm. A short latent period was necessary before the flicker potentials became organized after the beginning of a series of stimulation flashes. Once organized, there was an inherent rhythmicity which persisted for a short time after cessation of the intermittent stimulation. Subjects with a low per cent time alpha rhythm showed the widest range of flicker-following potentials. The upper limit of flicker-following was in all cases lower than the critical fusion frequency for the particular illumination. Flicker-following is interpreted as a succession of overlapping "on" responses. "On" responses to single flashes of light were observed in some subjects but never "off" responses. Optimum conditions for flicker-following depend on flash frequency, intensity, light-dark ratio, and size of test field. Following sometimes occurs at half and sometimes double the flash frequency.—*D. B. Lindsley (Brown)*.

[See also abstracts 2073, 2115, 2168, 2190, 2223.]

## RECEPTIVE AND PERCEPTUAL PROCESSES

2104. Atkinson, T. G. Visual field charting. Chicago: Professional Press, 1941. Pp. 128. \$4.00.—This book is "intended sheerly as a working manual . . . designed for the guidance of the ordi-

nary practitioner who wishes to avail himself of the diagnostics of field charting." It is divided into nine chapters entitled: (1) nature of field charting; (2) indications and uses of field charting; (3) the fields; (4) the technique; (5) apparatus; (6) procedure; (7) field defects; (8) pathology; and (9) interpretation. A physiological concept of color vision is presented in an appendix. Some conclusions are: "One is led to the belief that whatever the retinal mechanism of color sensation, it does not involve any photochemical process. . . . We are led to the belief that there are sets of cones which respond each to its proper wave length . . . and that these are distributed over the retina in the manner indicated by the areas of the color fields."—*N. R. Bartlett* (Brown).

2105. Berens, C. Visual-acuity test, applicable to testing large groups of subjects. *Trans. Sect. Ophthalm. Amer. med. Ass.*, 1939, 90, 472.—Abstract.

2106. Campbell, I. G. Factors which work toward unity or coherence in visual design. *J. exp. Psychol.*, 1941, 28, 145-162.—Designs constructed with regard for the esthetic principles of balance, proportion, rhythm, tonality and harmony were judged good (unified or coherent) while designs lacking these characteristics were judged poor. Degree of coherence in a design did not correlate positively with perceptual loss of separateness of parts. Natural parts of both good and poor designs were found to have the characteristics of regularity, good form, symmetry, high degree of isolation, and familiarity, while unnatural parts lacked these. Natural parts of good designs were instrumental in affecting the balance of the designs, while the unnatural parts were not. Neither natural nor unnatural parts affected balance in the poor designs. It is concluded that principles of natural sensory organization as well as experience or meaning factors must be considered as determinants of visual perceptions.—*H. W. Karn* (Pittsburgh).

2107. Crozier, W. J., & Wolf, E. The flicker response contour for *Phrynosoma* (horned lizard; cone retina). *J. gen. Physiol.*, 1941, 24, 317-324.—Although the horned lizard *Phrynosoma*, which has only cones in the retina, quickly approximates a condition of tonic immobility in the dark, it has been possible to secure certain data on the animal's optokinetic responses to moving stripes. When critical flash intensity was plotted as a function of flash frequency, the resulting simplex response curve could be well described by a normal probability integral. This curve displayed a markedly greater slope and higher median intensity level than that obtained with the turtle *Pseudemys* which also has a purely cone retina.—*D. K. Spelt* (Mississippi).

2108. Ferree, C. E., & Rand, G. Optimum working conditions for the eye. *Sight-Sav. Rev.*, 1940, 10, 3 ff.—[Abstracted review; original not seen.] Daylight, or artificial light approximating its composition, is recommended. Unfiltered Mazda bulbs are suggested in preference to blue bulbs which show green in excess. Tolerance to light intensities

differs in various age groups.—*D. J. Shaad* (Detroit, Mich.).

2109. Giraud, J. C. Étude audiométrique de la conduction osseuse dans l'examen de l'audition. (Audiometric study of bone conduction in the testing of hearing.) Paris: (Dissertation), 1939. Pp. 146.

2110. Gordon, B. L. Oculists and occultists; astrology and the eye. *Arch. Ophthalm.*, Chicago, 1941, 25, 36-61.—This paper concludes a series of articles on pre-scientific conceptions of disease and the healing arts.—*M. R. Stoll* (American Optical Company).

2111. Grether, W. F. Comparative visual acuity thresholds in terms of retinal image widths. *J. comp. Psychol.*, 1941, 31, 23-33.—The data of various investigators are analyzed to determine the minimal separable visual acuity of their subjects, which comprised birds, rats, monkeys, and chimpanzees. It is claimed that minimal separable acuity is a better comparative measure than visual angle acuity. Rhesus monkeys, chimpanzees, and man appear to have similar visual acuity. Acuity thresholds for birds were found to be several times higher than comparable human thresholds. The rat's acuity was found to be greatly deficient.—*N. L. Munn* (Vanderbilt).

2112. Hermans, T. G. Factors determining the direction of the visual after-image drift. *J. exp. Psychol.*, 1941, 28, 187-198.—Experimental evidence is presented to show that there are at least 2 factors involved in the determination of the direction of the visual after-image drift. One, the retinal factor, is the point of fixation relative to the object used to produce the retinal effects necessary for the production of the after-image. The other factor is the pattern of muscular stresses during retinal stimulation which leave their after-effects persistent during the experiencing of the after-image; this is called the muscular factor.—*H. W. Karn* (Pittsburgh).

2113. Hunter, W. A., & Pennington, L. A. The construction and use of a new apparatus in the training of the rat in auditory discrimination problems. *J. genet. Psychol.*, 1940, 57, 451-460.—A box with smooth metal walls has a floor grid 2 ft. square; in the center of this is a platform 3 ins. high, 2 ins. wide, 5 ins. long, having a second grid. Normal and operated rats were trained to avoid shock by jumping from one grid to the other and, subsequently, to do so in response to a 1,000 cycle tone (300-400 trials average) and to a buzzer (70-95 trials average). Control experiments showed that the animals did not rely on secondary cues in meeting the 90% criterion employed.—*D. K. Spelt* (Mississippi).

2114. Jenkins, W. L., & Stone, L. J. Recent research in cutaneous sensitivity: II. Touch and the neural basis of the skin senses. *Psychol. Bull.*, 1941, 38, 69-91.—This review is a continuation of one previously published (see XIV: 3968). The literature on touch is reviewed under: (1) distribution of sensitivity, (2) adaptation, (3) discrimination of intensity, (4) measurement of skin deformation, (5)



discrimination of extent, (6) localization, (7) two-point limen, and (8) perceptual phenomena. The section on the neural basis of the skin senses reviews the evidence bearing on the theory that the 4 cutaneous modalities have separate receptors and nerve pathways. Nafe's quantitative theory of feeling is rejected, and it is maintained that "the evidence obliges us to conclude that the allocation of fiber size-groups to the four modalities involves considerable uncertainty." 109 references.—A. W. Melton (Missouri).

2115. Klüver, H. **Visual functions after removal of the occipital lobes.** *J. Psychol.*, 1941, 11, 23-45.—The occipital lobes of 2 rhesus monkeys were removed in 2 stages 3 months apart and their visual functions tested. The pulling-in experimental technique was employed for pre-, post-, and inter-operative tests. The monkeys were able to respond differentially to continually present as well as suddenly appearing lights and to differences in the position of lights. Responses were not made to differences in brightness but only to differences in density of luminous flux entering the eye. The visibility curves obtained were similar to those of the human scotopic curve. And, finally, the results suggest that the topological aspects of the stimulus configuration may become effective in determining the responses of the animals.—F. A. Mote, Jr. (Connecticut).

2116. Kyrieleis, W. [In doubtful cases, can the existence of night blindness be proved with certainty?] *Klin. Mbl. Augenheilk.*, 1940, 104, 663.—[Abstracted review; original not seen.] A standard procedure for measuring dark adaptation under controlled conditions with automatic recording is recommended to prevent malingerers from deliberately repeating errors.—D. J. Shaad (Detroit, Mich.).

2117. Lassen, H. **Beiträge zur Phänomenologie und Psychologie der Anschauung.** (Contributions to the phenomenology and psychology of perception.) Würzburg-Aumühle: Konrad Triltsch, 1939. Pp. 220.—[Abstracted review; original not seen.] The position is maintained that reality is essentially spatial, and that space is essentially visual. There are 2 heterogeneous components in the spatial structure of objective reality: dimensional depth and dimensional extension. The relation of these components to the ego (which is spatially related to the objective world but not located in it) is discussed in detail.—F. W. Finger (Brown).

2118. Maude, J. **Optical convergence and stereopsis in relation to perspective.** *Med. J. Aust.*, 1940, 2, 281 ff.—[Abstracted review; original not seen.] Evolution and grades of binocular vision are discussed; in 100 art students, a relationship between artistic merit and voluntary convergence was shown to exist.—D. J. Shaad (Detroit, Mich.).

2119. McFadden, H. B. **Visual acuity.** Duncan, Okla.: Optometric Extension Program, 1940. Pp. 33.—In a study of visual acuity in relation to practice, dimensions of the test pattern, and conditions

of background, it is demonstrated that visual acuity should not be considered a static condition.—D. J. Shaad (Detroit, Mich.).

2120. Müller, H. V., Schultz, H. J., & Lautsch, J. **[The standardization of the dark-adaptation test.]** *Klin. Mbl. Augenheilk.*, 1940, 104, 649.—[Abstracted review; original not seen.] To insure comparable results in dark adaptation tests performed by different examiners, a standard curve for the examinations was devised.—D. J. Shaad (Detroit, Mich.).

2121. Schultz, J. H. **Seelische Reaktionen auf die Verdunklung.** (Psychological reactions to the black-out.) *Dtsch. med. Wschr.*, 1940, 66, No. 21.—[Abstracted review; original not seen.] Privation of light produces loss of optical orientation and changes in motor activity, thus confronting the individual with a twofold task of adjustment. Among the most typical reactions are: delay in dark-adaptation, inclination of the body to anticipate a fall, slow walk, raising of the feet higher than normally, use of hands, and orientation toward a point. Insecurity and anxiety are experienced. Sensibility to stimulation through other sense modalities is increased.—J. E. Bader (Brandon State School).

2122. Schumacher, F. **Reizschwelle während der Dunkeladaptation.** (Threshold during dark adaptation.) Copenhagen: (Dissertation), 1937. Pp. 59.

2123. Stevens, S. S., & Volkmann, J. **The quantum of sensory discrimination.** *Science*, 1940, 92, 583-585.—"The human organism can detect a change in a stimulus when its intensity is increased by a sufficient increment. This increment alters, presumably, a level of excitation somewhere in the nervous system, and the change in nervous activity leads to a discriminatory response. Problem: Does the change in nervous activity proceed by indefinitely small increments or does it proceed stepwise by finite increments or quanta? And are these quanta reflected in the discriminatory response itself?" A discussion of the experimental results to be expected upon the basis of theoretical and mathematical considerations is given. Curves representing the experimental findings support the theoretical expectations for the just noticeable loudness differences of a 1,000 cycle tone at different intensity levels. It is thus shown that by adequate experimental procedures it is possible to obtain results conforming to a quantal theory of sensory discrimination.—F. A. Mote, Jr. (Connecticut).

2124. Thomas, G. J. **Experimental study of the influence of vision on sound localization.** *J. exp. Psychol.*, 1940, 28, 163-177.—Two lights were presented at spatially separated positions, and a buzzer was sounded from various positions between the lights. Subjects made judgments of left, right, or middle depending on the region from which they heard the sound. One of the lights flickered in the same rhythm as the buzzer sounded. The results showed a tendency for the subjects to skew the judgments of the sound's location toward the

flickering light or the in-rhythm light as the case may be. The findings are interpreted as being a phenomenon of inter-sensory relations.—H. W. Karn (Pittsburgh).

2125. Tower, S. S. The unit of sensory reception in the cornea. *Trans. Amer. neurol. Ass.*, 1940, 66, 122-126.—Abstract and discussion.

2126. Watson, N. A., & Gales, R. S. Bone conduction threshold measurements: effects of occlusion and masking devices. *J. acoust. Soc. Amer.*, 1941, 12, 474-475.—Abstract.

2127. Wever, E. G., Bray, C. W., & Lawrence, M. Combination tones: their nature and origin in the auditory mechanism. *J. acoust. Soc. Amer.*, 1941, 12, 468.—Abstract.

[See also abstracts 2090, 2092, 2103, 2133, 2170, 2311, 2341, 2347, 2367, 2391, 2395, 2403, 2419.]

#### LEARNING, CONDITIONING, INTELLIGENCE

(incl. Attention, Thought)

2128. Bernard, J., & Gilbert, R. W. The specificity of the effect of shock for error in maze learning with human subjects. *J. exp. Psychol.*, 1941, 28, 178-186.—The object of this study was to determine whether, in a stylus maze situation in which moderate shock was given for entrance into some blind alleys but not for others, a different rate of learning and different scores would obtain for shock alleys as compared with non-shock alleys. 52 college students ran 20 trials each in the Fox maze. Learning in no case was complete. Possible differences in difficulty of blind alley mastery were controlled. The results indicate reliable differences in learning rates and simple error scores in favor of the shock alleys. The effect is interpreted as showing that shock has a specific influence upon the modification of responses to blind alleys in the stylus maze situation in addition to the general effects upon learning which have been demonstrated by earlier investigations.—H. W. Karn (Pittsburgh).

2129. Delgado, H. *Psicología general y psicopatología de la inteligencia*. (General psychology and psychopathology of intelligence.) *Rev. Neuro-Psiquiat.*, Lima, 1940, 3, 291-354.—A review of the field of intelligence and its abnormalities, with a bibliography consisting chiefly of European works.—J. E. Bader (Brandon State School).

2130. Douglas, J. W. B., & Whitty, C. W. M. An investigation of number appreciation in some sub-human primates. *J. comp. Psychol.*, 1941, 31, 129-143.—Flashes of light, dots on the top of boxes which concealed food, and successive sounds were used in an attempt to determine whether baboons are able to discriminate in terms of number. Discrimination of number may be demonstrated unequivocally only when "the animal is not choosing on the basis of pattern, the number is appreciated in all the sense modalities, the number is recognized in both spatial and temporal dimensions, the animal

is not reacting to any property of the component units of the number constellation." With such factors controlled, there was no sure evidence of number discrimination.—N. L. Munn (Vanderbilt).

2131. Eccher, W., & Culler, E. Reciprocal facilitation of the conditioned and conditioning mechanisms. *J. comp. Psychol.*, 1941, 31, 223-231.—This research was undertaken as the result of incidental observations in cats of a first order CR that showed no signs of impairment when used as the conditioning agent in second order conditioning and of a second-order CR that failed to show deterioration when used similarly in developing a third-order CR. Twenty-four cats were used in the present investigation. Bell-flexion developed as a CR of the first order clearly because more consistent and vigorous when used as the conditioning response in the next higher order. Thus, "the reinforcing behavior-unit is itself reinforced." Two hypotheses are presented: "(1) that the stimulus being conditioned 'makes way' for the conditioning stimulus by a form of *Bahnung*, thus making the response easier; (2) that the conditioned symbol (bell) becomes the focus of progressive organic involvement of the type underlying fear or mild phobia, which thus provides additional drive."—N. L. Munn (Vanderbilt).

2132. Ericksen, S. C. The effect of distributed and massed practice on the nature of errors made by normal and operated rats. *J. comp. Psychol.*, 1941, 31, 57-68.—Rats were given two daily trials in immediate succession on a 12-unit multiple-T maze. A record was kept of the blind alley entrances per trial. Thus trials could be compared in terms of the particular blinds entered. The two successive trials would represent massed while the last trial on one day and the first trial on the next would represent distributed learning. Normal and operated animals were used. After a 24-hour interval rats tended to repeat responses of the last previous trial. On the second trial (massed practice) of each day greater variability occurred and resulted in an increase in errors over the number exhibited on the immediately preceding trial. This effect was also present in those operated rats which were still able to learn. The results "are interpreted as lending support to the theory that during the interval there is a relatively greater 'stamping in' of the more frequently made responses, while massed practice has the effect of producing greater variability of behavior."—N. L. Munn (Vanderbilt).

2133. Fearing, F. The retention of the effects of repeated elicitation of the post-rotational nystagmus in pigeons. II. The retention of the effects of "distributed" stimulation. *J. comp. Psychol.*, 1941, 31, 47-56.—The methods used in this study have been described in a previous report. Post-rotational nystagmus was elicited from adult pigeons 10 times per day for 14 successive days. Retention of the effects still appeared after a period of 225 days. There was better retention for distributed than for massed stimulation, results of which were reported

in the first paper. The greatest loss occurs in the first 6 weeks. After 22 weeks the decrement is slow. "The resemblance of the retention and recovery effect as demonstrated in these experiments to those usually found in learning, suggest that the decrement in response following repeated elicitation of vestibular nystagmus is in the nature of learning."—*N. L. Munn* (Vanderbilt).

2134. **Gibson, E. J. Retroactive inhibition as a function of degree of generalization between tasks.** *J. exp. Psychol.*, 1941, 28, 93-115.—When syllable responses have been learned to a list of stimulus forms, variations from these forms generalize with the original forms, since the variations are responded to in a test series as if they were the originals. As the degree of generalization between corresponding stimulus members of a first and second list is increased, when responses in the two lists are different, there is a tendency for the second list to be harder to learn. Degree of retroactive inhibition of a first list varies directly with the strength of the tendency for the stimulus members of an interpolated list to generalize with those of an original list. Errors of overt localization occur during interpolated learning and relearning of the primary list. There is a tendency for the frequency of such errors to vary with the degree of generalization between the two lists. Errors of intra-list generalization occur during the learning of both the primary and interpolated lists, but such errors decrease from primary to interpolated learning.—*H. W. Karn* (Pittsburgh).

2135. **Gilhausen, H. C. Final goal versus sub-goal distance discrimination.** *J. comp. Psychol.*, 1941, 31, 35-42.—The hypothesis of built-up sub-goal expectations is tested in terms of maze learning. Rats had the choice of clearly discriminable long and short paths to a given point (sub-goal) at the entrance to a long straight alley leading to food. While it would be possible for them to discriminate the distances to the sub-goal, these distances plus that of the long straight path would be below the threshold. Thus selection of the shorter path to the sub-goal (at which no food was given) would indicate a sub-goal expectation. Selection of the shorter path occurred significantly more often than chance. Control groups were run as a means of checking secondary cues. Further experiments on the same general problem are suggested.—*N. L. Munn* (Vanderbilt).

2136. **Grant, D. A., & Meyer, H. I. The formation of generalized response sets during repeated electric shock stimulation.** *J. gen. Psychol.*, 1941, 24, 21-38.—Data were obtained from 41 subjects who formed one control and 2 experimental groups. The experimental groups were given a series of different neutral stimuli, then a series of shocks. Subsequently, changes in response tendencies to the neutral stimuli were noted. Physiological measures revealed that the subjects were emotionally upset during the experiment and that a group which received no warning signal prior to stimulation showed the greatest emotional upset. During the initial presentations of the neutral stimuli some hand

withdrawals were made by S's who had been told they would be shocked in the experiment; hand withdrawals occurred much more frequently in the post-training series (after the shock series) and were most frequent when no warning signal was given prior to stimulation. More neutral stimuli elicited responses as the experiment progressed. Data are presented with respect to changes in eyelid responses, relationships among responses, latency of hand withdrawals, and verbal reports made by the subjects.—*C. N. Cofer* (George Washington).

2137. **Green, L. A study of typewriting achievement in three high schools.** *J. educ. Res.*, 1940, 34, 209-217.—Study of results of weekly speed tests in typing in the high schools of El Paso, Texas, indicate that there is a steady development from week to week during the first two semesters. Short plateaus are reached in the second semester but still the development is fairly steady. There is a further slight development of speed during the third and fourth semesters, but the results indicate fluctuations. Errors increase during the first semester and the largest number of errors are found during the second semester. After the eleventh week the number of errors increases to the seventh week and then gradually decreases.—*S. W. Fernberger* (Pennsylvania).

2138. **Mowrer, O. H. Preparatory set (expectancy)—further evidence of its 'central' locus.** *J. exp. Psychol.*, 1941, 28, 116-133.—The aim of this study was to obtain further evidence which would bear upon the validity of two rival hypotheses on the nature of preparatory set. The hypotheses are: (1) that preparatory set necessarily involves both neural and muscular elements; (2) that preparatory set, as an essentially neural phenomenon, may exist and vary independently of muscular involvement. In an earlier study (see XIV: 3413) the author found that the quickness with which subjects made the same response to two different stimuli varied according to whether the subjects expected one type of stimulus more strongly than the other. The results were interpreted as due to purely neural factors. In the present study the author used cross-modality stimulation involving tactual and auditory senses. The previously demonstrated phenomenon again appeared, and since there are no known muscles which specifically adjust the tactual receptors for optimal functioning, hypothesis 1 is regarded as weakened by the findings and hypothesis 2 as strengthened. In another experiment two stimuli were again used in the same sense modality, but they were of such a character as to demand different receptor adjustments. The failure to obtain the phenomenon in question again suggests that it is dependent upon cross-modality stimulation rather than differential sense organ adjustments and supports the neural rather than the neuro-muscular theory of set.—*H. W. Karn* (Pittsburgh).

2139. **Mueller, W. Genie und Talent; über das Ethos im Kunstwerk.** (Genius and talent; ethos in art.) Munich: Ernst Reinhardt, 1940. Pp. 49.—



[Abstracted review; original not seen.] Genius is differentiated from talent: genius accomplishes its work by intuition, talent gains its ends by working through reflection. The sphere of genius is preferably the arts and philosophy, while all human activities are in the sphere of talent. True art belongs to genius, fine handwork to talent. Genius presupposes an instinctive apprehension of significant ideas, a receptive soul, a fine feeling for causality and logic, and a critical, imaginative mind.—F. W. Finger (Brown).

2140. Pasqualini, R. Sulla formazione di un riflesso condizionato nell'uomo. (The formation of a conditioned reflex in man.) *Neopsichiatria*, 1940, 6, No. 1.—[Abstracted review; original not seen.] The author used a vasodilator on 14 mentally ill patients for a period of time; then he used an inactive substance and still obtained lowered blood pressure and increased pulse. The results are interpreted as a conditioned response and as a contribution to reflex methodology applied to man. They are considered as of possible therapeutic value.—J. E. Bader (Brandon State School).

2141. Peak, H., Brooks, J., & Hobson, B. Positive and negative practice in the correction of spelling errors. *J. Psychol.*, 1941, 11, 103-114.—48 college students were divided into 2 groups equated on the basis of scores on the American Council Psychological Tests and on 2 spelling tests. One group practised 10 misspelled words by writing them correctly; the other group practised the same number of misspelled words, equated for difficulty, by writing them incorrectly, as they had misspelled them. On retests the negative practice was found to be equal to the positive practice. "The difference in this result and those in which either negative or positive practice has seemed to be the superior method needs discussion and further experimentation. Consideration of this point and an analysis of the relation of negative practice experiments to frequency theories of learning will be presented in a separate paper."—F. A. Mote, Jr. (Connecticut).

2142. Reyburn, H. A., & Taylor, J. G. Some factors of intelligence. *Brit. J. Psychol.*, 1941, 31, 249-261.—10 intelligence tests (verbal and performance) were given to 1497 school children aged 12-18 in the Transvaal (South Africa). The test results were intercorrelated, and the matrix submitted to factorial analysis by Thurstone's centroid method. 5 factors were isolated which from the nature of the tests in which they appeared seemed to be: an immediate memory factor, a verbal factor, a form of mental dexterity in dealing with perceived objects, an ability to find or make a significant pattern in a mass of irrelevant material, and an ability for logical elimination of irrelevancies. None of these factors can be identified with *g*; the authors discuss why in these tests *g* does not appear to function as a unitary factor.—M. D. Vernon (Cambridge Univ.).

2143. Roberts, J. A. F. Studies on a child population. V. The resemblance in intelligence

between sibs. *Ann. Eugen., Camb.*, 1940, 10, 293-312.—This study is based upon all the children whose homes were within the boundaries of the City of Bath on July 27, 1934, and whose birth dates fell between September 1, 1921, and August 31, 1925, a total of some 3400 children. The group consisted of 504 sets of two sibs, 49 sets of three, and two sets of four sibs. The sib-sib correlation was .535. Roberts concludes that the correlation is of the order to be expected if the multifactor inheritance is largely responsible for the determination of level of general intelligence. The sibs were broken into 3 groups, the brightest 4%, the median 4%, and the dullest 8%, selected on the basis of the Binet. The results for the dullest group show that the IQ's of the sibs of this group are distributed as would be expected from the general regression. The same is true for the brightest children and their sibs. No direct evidence is presented as to the relative importance of heredity and environment in determining the level of general intelligence.—J. W. Dunlap (Rochester).

2144. Stephens, J. M., Baer, J. A., & Stinnett, B. J. Spontaneous delay following the application of punishment and reward to strong and weak connections. *J. genet. Psychol.*, 1940, 57, 279-288.—30 high school boys and 19 college men and women answered a series of questions on superstitions and indicated the strength of their beliefs. Some time later the same questions were answered, using apparatus which automatically revealed to the subject whether his answer was correct, and registered the amount of time spent on each question. Detailed analyses of the data showed that subjects uniformly spent slightly more time examining questions to which they had given wrong answers in which they strongly believed, than on other questions.—D. K. Spelt (Mississippi).

2145. Steyn, J. W. S. The influence of the will to succeed on the performance in group-given mental tests. *Brit. J. Psychol.*, 1941, 31, 207-216.—A set of 9 tests on memory, manual operations, cancellation, etc. was administered to 56 students. On the basis of their scores on these tests, and on an intelligence test, the subjects were divided into 2 equal groups and retested; one group under conditions identical with those of the first testing the other under conditions involving strong incentives such as appeal, encouragement, suggestion, and exhortation. Repetition of the tests caused an increase in scores under both conditions. The incentive group showed no significant increase over the non-incentive group. It seems possible that the ordinary conditions under which mental tests are performed are such as to stimulate the subjects into trying their hardest in the first testing; or that the incentive used was not strong enough to produce any improvement in performance.—M. D. Vernon (Cambridge Univ.).

2146. Stone, C. P., & Smith, M. B. Serial discrimination by rats at the choice points of elevated mazes. *J. comp. Psychol.*, 1941, 31, 79-95.—

The investigators familiarized blind rats with cues which enabled them later to choose the correct path of complicated mazes at the first trial. Each blind of elevated mazes had an upward and each true path a downward inclination of 9°. Runway mazes had rough versus smooth paths. Preliminary training was carried out with simple maze patterns which changed from trial to trial but in each unit of which the opposing cues were provided. Then the complicated patterns were introduced. The success of blind rats in running these, in most instances without any errors, suggests that serial discrimination was the problem which confronted them. Similar results were obtained on elevated mazes with normal rats following a path differentiated by black and white cues. Seeing rats did not learn to follow visual cues in alley mazes which varied in pattern. Moreover, blind rats failed to follow an odor trial (oil of cassia) in elevated mazes of variable pattern.—*N. L. Munn* (Vanderbilt).

2147. **Treverton, M. W.** Degree of relatedness and retroactive inhibition. *J. gen. Psychol.*, 1941, 24, 3-20.—In some lists of 16 paired associate nouns the members of the pairs were related (fire-smoke), and in others the members of the pairs were unrelated (cuff-weight). The lists were presented to 18 subjects in the usual retroactive inhibition experiment, and the effects of relatedness in the lists used for original and interpolated learning were studied. A similar experiment was performed in which serial lists of words were used. In some of these lists there was no relationship among the items, whereas in others there was a relationship (college, song, bird, feather, etc.). "The related material was more susceptible [to retroactive inhibition] when related material was interpolated, and the unrelated material was more susceptible when unrelated material was interpolated." There was more overt transfer of response from one list to another when the original and interpolated lists were both composed of related items than when they were not. The results are discussed in terms of their possible explanation.—*C. N. Cofer* (George Washington).

2148. **Warden, C. J., & Galt, W. E.** Instrumentation in cebus and rhesus monkeys on a multiple platform task. *J. Psychol.*, 1941, 11, 3-21.—2 cebus and 2 rhesus monkeys were tested for skill in securing food reward from a platform by employing a series of rakes to draw the food toward them. The reward is placed at a certain distance from the monkey, and the animal required to employ the first (shortest) rake to secure the second rake (next shortest), the second to secure the third, etc., until he obtains the rake long enough to reach the food and draw it to him. Little training was necessary to reinstate this performance through the 4-rake level when the monkeys were tested for retention after a 2½ year interval. The problem was then complicated by employing two and three platforms on which the rakes were presented in a mixed order. The cebus monkeys gave better results in terms of complexity of problem mastered and in terms of comprehension of the tool-using function of the rake. One cebus

progressed to an 11-rake level. Two mangabeys were tested on the single platform and found to be inferior in comparison with rhesus monkeys previously tested.—*F. A. Mote, Jr.* (Connecticut).

2149. **Weinstein, B.** Matching-from-sample by rhesus monkeys and by children. *J. comp. Psychol.*, 1941, 31, 195-213.—Two monkeys and two children (34 and 37 months, IQ's of 133 and 97) were required to match in terms of sameness and other, in some instances quite complicated, factors. The human subjects differed from the monkeys in their more rapid mastery, broader generalizing ability, and the ability of one to verbalize principles.—*N. L. Munn* (Vanderbilt).

[See also abstracts 2043, 2096, 2160, 2182, 2238, 2258, 2259, 2358, 2386, 2422, 2431.]

## MOTOR AND GLANDULAR RESPONSES

(incl. Emotion, Sleep)

2150. **Abbott, H. R.** A pocket rule for the measurement of accommodation and convergence. *Arch. Ophthalmol., Chicago*, 1941, 25, 331-332.—The author describes a flexible steel tape with attachments which make it a compact substitute for the Prince rule.—*M. R. Stoll* (American Optical Company).

2151. **Bennett, M. A.** The social hierarchy in ring doves. II. The effect of treatment with testosterone propionate. *Ecology*, 1940, 21, 148-165.—(*Biol. Abstr.* XV: 2151).

2152. **Billingslea, F. Y.** The relationship between emotionality and various other salients of behavior in the rat. *J. comp. Psychol.*, 1941, 31, 69-77.—23 rats from an emotional and 23 from a non-emotional strain were tested in a number of different situations so that interrelationships could be determined. These tests indicate that "the emotional rat tends to be (1) less aggressive in a frustrating food situation and in the presence of a small air stream, (2) more timid in its home cage in the presence of the experimenter, (3) more curious and timid in Stone's wildness-savageness apparatus and a duplicating mesh-wire apparatus, (4) more active in the activity wheel, (5) show less behavior disturbance in a standard situation for producing abnormal behavior in the rat, than the non-emotional rat."—*N. L. Munn* (Vanderbilt).

2153. **Bongioanni, F. M.** Metafisica e psicologia del rimorso. (The metaphysics and psychology of remorse.) *Logos*, 1940, 23, 25-37.

2154. **Buel, J.** A simple method for measuring maximal patellar response. *J. gen. Psychol.*, 1941, 24, 223.—*C. N. Cofer* (George Washington).

2155. **Carmichael, L.** The experimental embryology of mind. *Psychol. Bull.*, 1941, 38, 1-28.—This address of the retiring president of the American Psychological Association considers the "original nature of man" as it has been revealed in experimental behavioral studies in fetal organisms. The discussion is developed under the following head-

ings: (1) introduction (and basic presuppositions), (2) the zero of behavior, (3) the senses in fetal life, (4) cutaneous pressure, (5) temperature senses, (6) cutaneous pain, (7) the proprioceptive complex, (8) the nonauditory labyrinth, (9) the organic senses, (10) smell, (11) taste, (12) audition, (13) vision, (14) motor development, and (15) general implications of the study of fetal behavior for psychology. In the last section it is pointed out that the experimental work with fetal organisms promises to illuminate particularly the problems of learning, transfer, and motivation.—*A. W. Melton* (Missouri).

2156. Cohen, J. I. The analysis of physique. *Eugen. Rev.*, 1940, 32, 81-84.—Some of the conventional anthropometric methods for measuring physical constitutional factors and indices of body-build, particularly those used by psychiatrists in measuring the association between physique and psychotic types, are reviewed. Many of these are invalid because size, as distinct from shape or proportions, influences the index. A compound of 4 measures, including chest depth, pelvic breadth, and shoulder breadth, was found to have discriminating significance between 86 adult male schizophrenics and 18 male manic-depressive Jewish patients. The multiple correlation coefficient of .319 is suggestive as having predictive value in assigning any particular patient to his psychotic group. The best single index for differentiating schizophrenics from manic-depressives is shoulder breadth times 100, divided by pelvic breadth. But the discriminating worth of various traits varies with age, sex, and race.—*G. C. Schwesinger* (American Museum of Natural History).

2157. Finger, F. W. Quantitative studies of "conflict." I. Variations in latency and strength of the rat's response in a discrimination-jumping situation. *J. comp. Psychol.*, 1941, 31, 97-127.—A quantitative index of the force and latency of jumping toward stimuli presented in a Lashley discrimination apparatus was obtained by use of the Russell type of jumping platform, a platform which swung back as the animal jumped. Movements of the platform were recorded kymographically. After discrimination of shades of gray (Hering series) was perfected, the amount of difference between the two brightnesses was reduced toward the threshold. The conflict introduced by this difficult discrimination was supplemented in some cases by enforced punishment (dropping). In general, the results were as follows: increase in force and latency with difficulty of discrimination; increase in force and latency with punishment; increase in force and latency with both difficult discrimination and punishment combined, but with increased latency particularly apparent; and small positive rank-difference correlations between force and latency of response during single sessions.—*N. L. Munn* (Vanderbilt).

2158. Frisch, J. A. Did the Peckhams witness the invention of a tool by *Ammophila urnaria*? *Amer. Midl. Nat.*, 1940, 24, 345-350.—The author reviews observations on the use of inorganic objects by

wasps in connection with nest building. The Peckhams' results are criticized adversely. "If the adoption of solid objects for pounding is the invention of a tool, the credit for the invention must be given to the first wasp to use this method . . . for the method is now an automatic habit, common to all *Ammophilas* in varying degrees of perfection."—*W. S. Hunter* (Brown).

2159. Hogben, L. Nature and nurture. (Rev. ed.) New York: Norton, 1940. Pp. 176. \$2.75.—See VIII: 3538.

2160. Kruse, M. Food-satiation for maze-bright and maze-dull rats. *J. comp. Psychol.*, 1941, 31, 13-21.—Eating curves for both groups were negatively accelerated. Bright animals ate more than dull ones. The apparently weaker drive in dull rats led to more irregular and flatter curves than were obtained for bright animals. Introduction of an emotion-provoking stimulation affected the eating activity of bright to a greater degree than that of dull rats. Application of these results to interpretation of maze learning differences is discussed.—*N. L. Munn* (Vanderbilt).

2161. Leblond, C. P. Nervous and hormonal factors in the maternal behavior of the mouse. *J. genet. Psychol.*, 1940, 57, 327-344.—Experiments with more than 250 mice showed that retrieving, licking, and cuddling of the young could be elicited readily in lactating females, virgin females, and normal males after sensitization of the adults by contact with the young in the cage. Since neither castration nor hypophysectomy prevented such behavior, neural mechanisms appeared more important than hormones in its determination. Other features of maternal behavior, such as nest building, prolonged station on the nest, and defense reactions, did not seem directly related to the retrieving-licking-cuddling pattern.—*D. K. Spelt* (Mississippi).

2162. Mira, E. Análisis estructural del miedo. (Structural analysis of fear.) *Rev. Psiquiat. Crim.*, B. Aires, 1940, 5, 215-226.—Fear is a residual of an inherent property of living matter, the immobilizing reflex, which occurs when an organism is submitted to sudden injurious stimuli exceeding its adaptive power. In man, this is manifested by insecurity, ego contraction and impoverishment, and painful loss of continuity of adequate reaction. Mira has observed this in war—Pavlov's reflex of passive defense, singularly similar in effects to fatigue and sleep. The phases of regression in fear are: prudence (voluntary, satisfying); precaution (repetition, concealed fear of failure); alarm (slowing and confusion of thought, decreased perception, vacillation in actions necessary to control the situation, secondary behavior); anxiety (conflict between cortical inhibition and diencephalic stimulation, visceral tempest); panic (mesencephalic control, predominance of subconscious, twilight states, forward flight); terror (mesencephalic exhaustion, relaxation, stupor). Since fear is individual devaluation at a given moment and anticipation of disaster, its antidote is self-affirmation and belief in action.



Fear will disappear in proportion to man's capacity to control his destiny. The fight against fear is the most urgent task of social psychotherapy, and on its result depends the fate of the world.—*M. E. Morse* (Baltimore, Md.).

2163. Plessner, H. *Das Problem von Lachen und Weinen*. (The problem of laughing and crying.) *Tijdschr. Phil.*, 1940, 2, 317-384.—This is a study of laughing and crying as related forms of human expression. In ordinary motor activities the individual uses his organism to make necessary adjustments; in laughing and crying the organism makes the response autonomously without being controlled by his volition. This points to a dual relationship: a being having a body and a being in a body, through which concepts these phenomena become comprehensible. Facial expressions and gestures relieve tension and are symbolically abbreviated substitutes for goal-directed activity. Laughing and crying, on the other hand, express loss of self-control and a disorganization between the personality and its physical existence. In their inarticulateness lies their essential expressive significance.—*H. Beaumont* (Kentucky).

2164. Roper, K. L. *Paralysis of convergence*. *Arch. Ophthalmol.*, Chicago, 1941, 25, 336-353.—A review of facts and opinions concerning the anatomical bases for convergence paralysis, its manifestations, and the differentiation of functional from organic disturbances. One case is described.—*M. R. Stoll* (American Optical Company).

2165. Rostand, J. *Hérédité et racisme*. (Heredity and the study of race.) Paris: Gallimard, 1939. Pp. 126. Frs. 10.

2166. Sanfilippo, G. *Prime osservazioni sul morfinismo sperimentale nel cane giovane*. (First observations on experimental morfinism in the young dog.) *Arch. ital. Sci. farmacol.*, 1939, 8, 161-172.—(*Biol. Abstr.* XV: 2309).

2167. Seward, J. P., & Seward, G. H. *Studies on the reproductive activities of the guinea pig. IV. A comparison of sex drive in males and females*. *J. genet. Psychol.*, 1940, 57, 429-440.—Using 2 forms of hurdle box, 14 male guinea pigs were tested after sexual satiation (5 mins. of inactivity in the same cage with a receptive female) and after several days' deprivation. 17 females were tested during oestrus and dioestrus. Males crossed more quickly and more often after deprivation than after satiation, but females did not cross more readily in oestrus than in dioestrus. The implications of the data are discussed.—*D. K. Spelt* (Mississippi).

2168. Spiegel, E. A., Miller, H. R., & Oppenheimer, M. J. *Forebrain and rage reactions*. *Trans. Amer. neurol. Ass.*, 1940, 66, 127-131.—Abstract and discussion. (See XV: 1704).

2169. Vaughan, W. T. *Strange malady; the story of allergy*. New York: Doubleday, Doran, 1941. Pp. xvii + 268. \$3.00.—This is a general and popular presentation of the subject of allergy with some consideration in the final chapters of the

role of emotional disturbances in the attacks.—*W. S. Hunter* (Brown).

2170. Waring, H. *The chromatic behavior of the eel (*Anguilla vulgaris* L.)*. *Proc. roy. Soc.*, 1940, B 128, 343-353.—(*Biol. Abstr.* XIV: 13180).

2171. Winslow, C. N. *A test of equivalence of an emotional stimulus in a macacus monkey*. *J. genet. Psychol.*, 1940, 57, 441-444.—A female macacus monkey about 2 yrs. old regularly displayed anger toward women, never toward men. A large doll did not elicit the characteristic emotional behavior; a man in woman's clothing elicited some elements of it, and a woman in man's clothes other segments after a short delay. None of these stimuli was equivalent to a normally-dressed woman.—*D. K. Spelt* (Mississippi).

2172. Yacorzynski, G. K., Halstead, W., & Fearing, F. *Relationship between the experimental reduction of vestibular nystagmus and equilibrium*. *J. Psychol.*, 1941, 11, 161-171.—"Two groups of pigeons, 23 and 24 animals in each group, were tested for their ability to maintain their balance on a continually accelerated perch. The nystagmus of one of the groups of animals was reduced by 58 rotations prior to the test on the perch, and of the other after the perch test." There was found no difference in the duration of the post-rotational nystagmus between the 2 groups, but the pigeons who had their nystagmus reduced before the perch test showed superior ability to maintain their balance. The authors suggest that this difference may be due to the fact that, when the nystagmus is reduced by repeated rotations, other accompanying responses, such as nausea, which would tend to disrupt the muscular co-ordination necessary for balancing are also proportionally reduced.—*F. A. Mote, Jr.* (Connecticut).

[See also abstracts 2087, 2091, 2095, 2121, 2133, 2143, 2145, 2191, 2198, 2202, 2205, 2224, 2294, 2407, 2410, 2435.]

## PSYCHOANALYSIS, DREAMS, HYPNOSIS

2173. Brill, A. A. *An American precursor of Freud (Dr. Andrew J. Ingersoll)*. *Bull. N. Y. Acad. Med.*, 1940, 16, 631-641.

2174. Castellano, F. *Freud y el psicoanalisis; introduccion al psicoanalisis de Freud*. (Freud and psychoanalysis; an introduction to the psychoanalysis of Freud.) *Rev. Univ. Córdoba*, 1939, 26, 1440-1456.

2175. Dorcus, R. M., Brintnall, A. K., & Case, H. W. *Control experiments and their relation to theories of hypnotism*. *J. gen. Psychol.*, 1941, 24, 217-221.—3 types of experiments on hypnotism are cited in which the results can be explained in terms of the attitude of the subject. Results of a questionnaire study show that college students are not naive about hypnosis, although this is frequently assumed by experimenters. An experiment in which the behavior of hypnotized subjects was compared with that of controls when both groups were left

to their own devices "showed that the hypnotic subjects in the absence of definite instructions tend to awaken of their own volition and tend to incorporate into their thinking the important factors in their normal existence." Theories of the nature of hypnotism are questioned.—C. N. Cofer (George Washington).

2176. Erickson, M. H., & Erickson, E. M. Concerning the nature and character of post-hypnotic behavior. *J. gen. Psychol.*, 1941, 24, 95-133.—No specific study of the nature of the post-hypnotic state was found in the literature, although there has been recognition that it is a peculiar mental state. On the basis of much observation, the authors believe that in relation to the post-hypnotic performance there is "the development of a spontaneous, self-limited, post-hypnotic trance, which constitutes an integral part of the process of the response to and execution of post-hypnotic commands." The post-hypnotic trance may be single or multiple, brief or prolonged; usually it appears only briefly at the beginning of the post-hypnotic performance. Interference with this performance leads to cessation of the subject's behavior and a prolongation of the trance; under these conditions "direct evocation of hypnotic phenomena typical of the ordinary induced hypnotic trance" is possible. Temporal influences, apparent exceptions, the dissociative character of the post-hypnotic act, and suggestions for the utilization of the post-hypnotic trance in other studies are discussed. 14 references.—C. N. Cofer (George Washington).

2177. Federn, P. Psychoanalysis as a therapy of society. *Amer. Imago*, 1940, 1, No. 4, 65-80.—Much recent psychoanalytical work has been concerned with characterology and with the relations between the individual and society. Psychoanalysis can and must have a constructive as well as a critical social influence. The analyzed person is of more value to his social group. The charge that psychoanalysis has undermined the foundation of morality is refuted. Psychoanalysis is attempting to trace the interrelations of society to their dynamic causes and to make these causes conscious. Ways in which psychoanalysis as a treatment of society has been of value are specified.—W. A. Varvel (Chicago).

2178. Francisco Beca, M. Ensayos médico-psicológicos. (Medico-psychological essays.) Santiago de Chile: 1940. Pp. 69.—[Abstracted review; original not seen.] This is a collection of 4 essays. (1) "On psychoanalysis" is an attempt to reconcile psychoanalysis with psychology. Psychoanalysis should be limited to psychotherapy and not be extended to any other field. (2) "Psychic aspects of modern culture" is a psychoanalytic interpretation of present-day social problems. Such problems are seen as diseases due to over-excitation of the sex instinct and its consequent repression, which in turn results in sadism as expressed in war and class and race struggles. (3) "Materialism and spiritualism in psychology" accepts psychophysical interactionism as the solution of the mind-body question.

(4) "On psychopedagogy" points out errors in educational theory advocating orientation toward a spiritual goal.—J. E. Bader (Brandon State School).

2179. Greenacre, P. The predisposition to anxiety. *Psycho-anal. Quart.*, 1941, 10, 66-94.—A review of the literature discloses evidence of the possible existence of a pre-anxiety reaction occurring in foetal life, which is manifested in reflex reactions, intensified by untoward conditions of the prenatal, natal, or immediately post-natal period, and which is devoid of psychic content until the event of birth provides the first sense of a lack of familiarity with surroundings. This pre-anxiety reaction, however much determined genetically, aroused by various factors becomes organized at birth into an anxiety reaction, and hence, variations in the birth process and painful situations in the earliest post-natal weeks may serve to increase the organic anxiety response and thus heighten the anxiety potential, thereby laying a foundation for severe reactions in later life.—M. H. Erickson (Eloise Hospital).

2180. Janet, J. Souvenirs et problèmes. (Recollections and problems.) In Various, *Mélanges Pierre Janet*. Paris: Editions d'Artrey, 1939. Pp. 113-121.—The author reports a number of instances of telepathy, premonition, action at a distance, and hypnotism, which he found among the patients of his brother, Pierre Janet, and Charcot. General hypotheses on the nature of these phenomena as exhibited in men and animals are suggested.—C. Nony (Sorbonne).

2181. Marette, F. Psychanalyse et pédiatrie. (Psychoanalysis and pediatrics.) Paris: (Dissertation), 1939. Pp. 284.

2182. Oberndorf, C. P. Co-conscious mentation. *Psycho-anal. Quart.*, 1941, 10, 44-65.—Co-conscious mentation is defined as 2 streams of contemporaneous conscious mentation, not necessarily flowing in the same direction or concerned with the same topic. They may appear in 3 forms: (1) as a concomitant repetitive registration, seemingly meaningless; (2) as a critical, commenting, allusive function toward the intentional thought flow; (3) as thinking about topics unrelated to the primary thought. These ideas are discussed in relation to the author's clinical findings on 3 such cases. Conclusions offered are: that pathological co-conscious thinking is an obsessional symptom involving thinking itself; that it falls into the general categories of split personality, feelings of unreality, and depersonalization, and that it may be associated with unusual libidinalization of thinking; that double conscience and double consciousness are closely related, and may be identical; that the etiological force may be the need for the protection of the ego needs; and that there is evidence that co-conscious mentation may function as defense against anxiety.—M. H. Erickson (Eloise Hospital).

2183. Rosenheim, F. Flight from home: some episodes in the life of Herman Melville. *Amer. Imago*, 1940, 1, No. 4, 1-30.—This paper considers Melville's early career up to his writing of *Moby*

Dick at 32. A detailed analysis of his preceding books, *Mardi* and *Redburn*, throws light on his character in general and specifically on two episodes, termed his flight from home. His trips abroad are interpreted as involving an imitation of his father, a fantasy of having been cast off by his mother, a denial of his anxiety and dependency, and a suicidal motive.—*W. A. Varvel* (Chicago).

2184. Soares de Souza, D. A antropologia psicoanalítica. (Psychoanalytic anthropology.) *Rev. Neurol. Psiquiat.*, S. Paulo, 1940, 6, 205-212.—Freud's work developed in 2 phases: psychoanalysis as psychological treatment and, later, an ambitious extension as an anthropological theory, offering a new picture of man and a new interpretation of culture. This theory of personality was biological. Freud's great error was to abandon inquiry into the instincts and to try to reduce man to them. His theories were constructed with pathological material and were unadapted to treating extra-psychological problems. He appeared unaware of the contemporary movement to free psychology from biological postulates. As long as he limited himself to observations of nature, his intuitive genius illuminated the inner processes of mental activity, but when he turned to the world of values he was less successful. In reality, there were two Freuds, the one criticized above, and the acute investigator who opened up new paths in psychopathology, medicine, and psychology.—*M. E. Morse* (Baltimore, Md.).

2185. Webster, D. The origin of the signs of the Zodiac: an interpretation from the psychological viewpoint. *Amer. Imago*, 1940, 1, No. 4, 31-49.—On the basis of self-observation of hypnagogic phenomena, a theory is developed concerning the origin of the Zodiacal signs. It is believed that in narcissistically identifying the sky with his body man experienced some autosymbolizations which determined the special names given to the 12 signs.—*W. A. Varvel* (Chicago).

2186. White, R. W. An analysis of motivation in hypnosis. *J. gen. Psychol.*, 1941, 24, 145-162.—Two factors involved in susceptibility to hypnosis are: what needs are awakened in the subject in relation to hypnosis (motivational factors) and a suitable aptitude, perhaps a constitutional capacity. In the hypnotic situation there is an unusual personal relationship, the central press of which is dominance. The character of this press is modified by the purpose of the experiment, the attitude of the operator, and preconceptions derived by the subject from various sources. Age, sex, extraversion, and submissiveness are not found to be related to hypnotizability in most studies, although the methods in the case of the latter 2 traits are questionable. Deference is related positively to hypnotizability, and the need for autonomy is negatively related. Passivity and many other manifest needs also seem to be related to hypnotizability. Latent needs (deriving from childhood) are also aroused by the hypnotic situation. Such needs as those for love, compliance or abasement, and participation in omnipotence may facilitate hypnosis, whereas a

need for aggression may interfere with it. Recommendations for research which would go beyond the motivational factors and get at the basic hypnotic aptitude are presented. 21 references.—*C. N. Cofer* (George Washington).

2187. Young, P. C. Experimental hypnotism: a review. *Psychol. Bull.*, 1941, 38, 92-104.—The present review covers the period from 1930 to 1939 and is selective with regard to the problems discussed and the literature cited. The problems considered are: (1) Does hypnotizability correlate with other personality traits? (2) Does hypnotizability correlate with suggestibility? (3) Is hypnosis a dissociated state? (4) Is hypnosis a waking state? (5) Are there different types of hypnosis? (6) Hypnotic regression—fact or artifact? (7) Hypnosis as an experimental procedure. (8) Is hypnosis dangerous? (9) Unusual organ changes. (10) Hypnogenic mechanisms. "Hypnosis emerges from its recent oversimplification as a very complex—not to say enigmatic—reaction pattern, differing perhaps not only in individuals, but also in types of individuals. It may possibly differ according to the methods employed in inducing it, the criteria used in selecting subjects, and the expectation of the subjects. . . . The conditioned reflex theory seems to have more promise etiologically than do theories of suggestion or dissociation. . . ." 87 references.—*A. W. Melton* (Missouri).

[See also abstracts 2060, 2225, 2263, 2309, 2310, 2326.]

## FUNCTIONAL DISORDERS

2188. Abrahamsen, D. Mass-psychosis and its effects. *J. nerv. ment. Dis.*, 1941, 93, 63-72.—After a brief historical review the author considers the phenomenon of mass-psychosis from the psychological and sociological point of view. Illustrations are presented and the importance of methodical propaganda, the radio, the press, the use of color effects and catch words, etc. in the production of mass-suggestion is described.—*M. Keller* (Butler Hospital).

2189. Adrogué, E. [Consideration on the optic agnosias.] *Arch. Otol. B. Aires*, 1939, 14, 668 ff.—[Abstracted review; original not seen.] A complete review of the subject, including anatomical data, limits of cortical blindness, general considerations of optic perceptions, psychic blindness, and agnosias of the optico-spatial type. Bibliography.—*D. J. Shaad* (Detroit, Mich.).

2190. Akelaitis, A. J. E. A study of gnosis, praxis and language following partial and complete section of the corpus callosum. *Trans. Amer. neurol. Assn.*, 1940, 66, 182-185.—Abstract and discussion.

2191. Barahal, H. S. Testosterone in psychotic male homosexuals. *Psychiat. Quart.*, 1940, 14, 319-329.—Seven psychotic male homosexuals were treated with testosterone propionate. Some stimulation of secondary sex characteristics and increase



of libido were observed, but there was no change in the direction of libido, homosexual activity being increased. Little or no change was noticed in mental condition. These results are considered as supporting the psychoanalytic view of bisexual constitution, with the amount of gonadal hormone present in the blood merely determining the force of libido rather than the direction.—*R. C. Moore* (Boston Psychopathic Hospital).

2192. **Bendit, M.** *L'étude des perversions sexuelles acquises.* (The study of acquired sexual perversions.) Paris: (Dissertations), 1940. Pp. 116.

2193. **Bing, R.** *Textbook of nervous diseases.* (5th ed., trans. & enlarged by W. Haymaker.) St. Louis: C. V. Mosby Co., 1939. Pp. 850. \$10.00.—[Abstracted review; original not seen.] The present translation from the German has been prepared under the supervision of the author to meet the needs of American students and readers. Anatomical and physiological data have been added throughout.—*M. Keller* (Butler Hospital).

2194. **Bluemel, C. S.** *Stammering and inhibition.* *J. Speech Disorders*, 1940, 5, 305-308.—This paper is a reply to Kenyon's criticism of the author's theory regarding stammering as a form of inhibition of conditioned speech responses (see XIV: 5108). Various forms of functional disorders in which inhibition manifests itself, such as cataplexy, fainting, dysphagia, and hysterical anaesthesia, are cited to show the plausibility of the theory. "Most forms of inhibition are not only total or partial, but they are also variable in their intensity; the resultant functional disorder is therefore a changing phenomenon, and not infrequently intermittent." The author admits that "there is still much to be learned regarding stammering and inhibition," but he is convinced of the relationship between the two conditions.—*C. V. Hudgins* (Clarke School).

2195. **Böszörményi, G., & Mérei, F.** *Zum Problem von Konstitution und Prozess in der Schizophrenie auf Grund des Rorschach-Versuches.* (The problem of constitution and process in schizophrenia on the basis of the Rorschach test.) *Schweiz. Arch. Neurol. Psychiat.*, 1940, 45, 276-295.—The authors analyze a case in which the Rorschach test was made before the manifestation of the disease and again at the beginning of an insulin remission following a katatonic excitement. Comparison of the 2 tests shows that during schizophrenia the schizothymic introversion perception type can change into an extratensive, i.e., the schizothymic constitutional reaction changes both quantitatively and qualitatively. The authors divide the psychological process evidenced by the answers into a motor and a sensory component. They relate the disappearance of motor interpretations (ontogenetically later than form or color) to the regression, suggesting that abolition of the connections between kinesthetic engrams and visual perceptions may be due to functional disturbances in the parieto-occipital region, thus being homologous with paralogic thinking. The increase in color answers

is probably due to the schizophrenic regressive process and the lifting of repression. Affectivity is turned inward and blocked against the outside world, but by no means extinguished.—*M. E. Morse* (Baltimore, Md.).

2196. **Bowlby, J.** *Personality and mental illness.* London: Routledge, 1940. Pp. 280. 12s. 6d.—[Abstracted review; original not seen.] This book surveys critically some of the outstanding theories of personality (including those of Kraepelin, Hoch, Kretschmer, Jung, and Kahn) and the evidence on which they are founded. After examining a variety of clinical material, the writer isolates 33 personality traits which appear to be specific to the schizoid, and corrects certain misconceptions about syntone and schizoid personality. Light is thrown on the relation of neurosis to psychosis by a study of the personalities of neurotic patients. A new classification of the neuroses is proposed.—*F. W. Finger* (Brown).

2197. **Burpee, R. H.** *Seven quickly administered tests of physical capacity, and their use in detecting physical incapacity for motor activity in men and boys.* *Teach. Coll. Contr. Educ.*, 1940, No. 818. Pp. vi + 151.—A test of physical capacity was developed which can be administered with a minimum of equipment and time, by examiners not trained in medicine. 305 items taken from 89 tests of physical education were examined and classified according to ease of administration. All items were eliminated which required equipment not readily obtainable, more medical knowledge than that possessed by the usual examiner, and which took more than two minutes to administer. Items were desired which would supplement the medical examination, would serve to differentiate between those able to participate in activities and those unable to do so, would be reasonably objective, and yet would not be duplicated in other items. 7 items which satisfied all criteria were selected. 27 men were given the completed test. Immediate retest results yielded reliability coefficients varying from .75 to .94. Tests were also repeated over extended periods of time and with different examiners. The latter yielded an  $r = .97$ . Diagnostic value varied with type of abnormality. Bibliography of 149 titles.—*L. Birdsall* (Coll. Ent. Exam. Board).

2198. **Curtis, H. C.** *Psychosis following the use of marijuana.* *J. Kans. med. Soc.*, 1939, 40, 515 ff.

2199. **Daniels, E. M.** *An analysis of the relation between handedness and stuttering with special reference to the Orton-Travis theory of cerebral dominance.* *J. Speech Disorders*, 1940, 5, 309-326.—1548 college students were given handedness tests and speech tests to determine the relation between handedness and stuttering. Of 34 members of the group who were left-handed one was a stutterer. Of 138 members, classified as ambidextrous, 4, or 2.9%, were stutterers. Of 77 members who reported a shift in handedness one was a stutterer. The speech tests revealed 20 stutterers in the entire group. The author concludes that the data "leads

little or no support to many relationships commonly reported as existing between handedness and stuttering." Before further research is undertaken, handedness itself must be more clearly understood and better tests of handedness be worked out. Bibliography of 52 titles.—*C. V. Hudgins* (Clarke School).

2200. *Fraser, R., & Sargent, W.* The subjective experiences of a schizophrenic illness; personal records written at the end of the illness by some patients who were treated with insulin. *Character & Pers.*, 1940, 9, 139-151.—Subjective records of 5 patients reveal some of the mental conditions experienced and transitions made during the progress of the disease and the period of treatment. These include: sudden transition from normal thinking and behavior to a state with bizarre delusions, sudden appearance of hallucinations with consequent delusions, and gradual appearance of hallucinations recognized by the patient.—*M. O. Wilson* (Oklahoma).

2201. *French, T. M., & Kasanin, J.* A psychodynamic study of the recovery of two schizophrenic cases. *Psychoanal. Quart.*, 1941, 10, 1-22.—The authors review material from the case histories of 2 patients who received no therapy other than that of good physical care and sympathetic interest such as is offered in every good psychiatric hospital, and who achieved an unexpected recovery. They conclude "(1) that an acute psychosis may be a transitional episode in the process of emancipation from an old method of adjustment and 'learning' a new one, and (2) that the mechanism of recovery from such a psychosis may be indicated in advance during the acute psychosis by the content of the delusions."—*M. H. Erickson* (Eloise Hospital).

2202. *Gray, M.* The X family: a clinical and laboratory study of a "stuttering" family. *J. Speech Disorders*, 1940, 5, 343-348.—Two branches of the family were studied to determine the distribution of stuttering similarities or differences among stutterers, former stutterers, and non-stutterers, and to determine the nature of the evaluations or assumptions expressed by the family regarding stuttering. One branch of the family had moved to a neighboring state three generations previous to the study. There had been little or no intercourse between the two branches after the separation. The incidence of stuttering among two generations of one branch is 40% while only one stutterer among 17 members of the other branch was noted. Doubt is expressed as to the validity of the heredity hypothesis as an explanation of these differences. Environmental causes, expressed as attitudes, evaluations, and neurolinguistic patterns, appear to be more plausible explanations. One branch of the family may be considered as stuttering conscious as a result of these causes while the other is not.—*C. V. Hudgins* (Clarke School).

2203. *Gutiérrez-Noriega, C.* Significado de los dibujos en la historia de un esquizofrénico. (Significance of drawings in the history of a schizophrenic.) *Rev. Neuro-Psiquiat.*, Lima, 1940, 3,

355-392.—The pictures express pathological experiences, reflecting the changes in perception; psychopathological experiences, reflecting vague, distorted, or bizarre interpretation of ideas; and a constant desire, like the drawings of primitive people. The various factors have a strict relationship to the symptoms of the patient and reveal unconscious processes. The drawings are intuitive imaginations or immediate data of the conscious and are not originated by juxtaposition of associations.—*J. E. Bader* (Brandon State School).

2204. *Halpern, F.* Rorschach interpretation of the personality structure of schizophrenics who benefit from insulin therapy. *Psychiat. Quart.*, 1940, 14, 826-833.—A comparison of Rorschach protocols from insulin-treated schizophrenic patients show definite differences between the improved and unimproved patients, in records taken before treatment. The improved group showed greater productivity of response, more active emotionality as shown by color responses and chiascuro responses, more capacity for inner living as shown by the movement responses, and greater empathy capacity as shown by the frequency of human responses. The unimproved group showed a picture of rigid personality, nonproductive, incapable of emotional response, and with little capacity for identification with other people. Analysis of individual records suggests the Rorschach to be of definite prognostic significance as an aid in selecting patients for treatment. Post-treatment records, in both groups, more closely approximate normal pictures, with a better relationship between whole and detail, a greater awareness of reality and a more practical approach to the situation, an increase in emotional receptivity, and in the improved group, a swing from the indications of impulsive emotionality to a more socially acceptable sort. However, some of the post-treatment records for improved patients still show definite schizophrenic patterns.—*R. C. Moore* (Boston, Psychopathic Hospital).

2205. *Hammargren, S., & Porje, I.* Förändringar i symtombilden vid tre fall av akut psykos efter tillförsel av vitamin B<sub>1</sub> fumarat och pyrofosfat. (Changes in the symptom picture in three cases of acute psychosis after administration of vitamin B<sub>1</sub>, pyrophosphate, and fumarate.) *Svenska Läkartidn.*, 1940, 37, 1893-1898.—The intravenous injection of 10-50 mgr. vitamin B<sub>1</sub> and pyrophosphate plus 200-500 mgr. of fumarate had a striking effect in 3 out of 11 cases of psychosis. There was a temporary improvement in the symptom picture for ½-5 hours after the injection, after which there was a gradual relapse. Agitation, exaltation, mutism, rejection of food, and hallucinations disappeared partly or entirely. In 2 of the cases, where the temperature was subfebrile, it returned to normal, to rise again when the treatment was discontinued. The intravenous injection of fumarate alone produced a similar, but less pronounced, effect. Vitamin B<sub>1</sub> and pyrophosphate alone had no demonstrable effect. The continuous intramuscular injection of B<sub>1</sub> and fumarate caused an improvement

which lasted 2 days after the treatment was stopped. Bibliography.—*M. L. Reymert* (Mooseheart Laboratory for Child Research).

2206. **Harrison, R.** Studies in the use and validity of the thematic apperception test with mentally disordered patients. II. A quantitative validity study. *Character & Pers.*, 1940, 9, 122-133.—Stories of 40 functional patients (schizophrenic and manic-depressive) written in response to a series of pictures presented under clinical conditions were used. Biographical and personality information was deduced with a high degree of validity. Common patterning of institutional types was indicated. Theories of the unity and congruence of personality were confirmed. (See XV: 299, 2207.)—*M. O. Wilson* (Oklahoma).

2207. **Harrison, R.** Studies in the use and validity of the thematic apperception test with mentally disordered patients. III. Validation by the method of "blind analysis." *Character & Pers.*, 1940, 9, 134-138.—By blind analysis is meant that the analysis is made by someone other than the one administering the test. The method of the thematic apperception test consists in having subjects write stories in response to a series of pictures. Patients with functional psychoses were used as subjects. Blind analysis gives results similar to previous methods of validation (see XV: 299, 2206). Biographical and personality information was deduced with a fair degree of accuracy, although with less accuracy as when behavior cues were available. Psychiatric diagnoses and intelligence were inferred with fair to reasonably high accuracy.—*M. O. Wilson* (Oklahoma).

2208. **Heilpern, E.** A case of stuttering. *Psychoanal. Quart.*, 1941, 10, 95-115.—A brief review is given of the psychoanalytic studies of stuttering, and the author accepts as basic Fenichel's formulation of the problem: "It is a pregenital conversion neurosis presupposing an erotization of the speech function; the disturbance which concerns the speech function involves infantile sexual strivings; regularly it has a pregenital, mostly anal, and underlying oral character; its aims are almost constantly of an exhibitionistic and sadistic nature. Therefore, to explain a case of stuttering analytically means (1) to examine whether it likewise corresponds to this formula, (2) to account, above all, for the displacement of pregenital eroticism upon the speech function, and further (3) to explain the overdetermination relative to the fixation of the pregenital eroticism." The author's analytical findings on a stuttering patient are then discussed in detail and found to be in accord with Fenichel's formulation.—*M. H. Erickson* (Eloise Hospital).

2209. **Heltman, H. J.** Contradictory evidence in handedness and stuttering. *J. Speech Disorders*, 1940, 5, 327-331.—The author reviews recent literature on the relationship of handedness and stuttering and discusses it in the light of the data presented by Daniels (see XV: 2199). He concludes: (1) There was no hazard involved when 77 indi-

viduals were taught to use their right, instead of their left, hands. The one case of stuttering (Daniels) "could not be attributed to the fact of change."

(2) Since the frequency of stuttering is twice as great (Daniels) among the ambidextrous as among those who were shifted "it might have been advisable, as a preventative measure, to have taught all ambidextrous [individuals] . . . to write with their right hands." (3) Since the frequency of stuttering among the left-handed is over twice as great as among the group which shifted "it may have been good hygiene had they been taught to write with their right hands." These conclusions are admittedly speculative, and only repeated yearly studies will "justify a revision of techniques and therapy now in vogue, which are based on the cerebral dominance theory."—*C. V. Hudgins* (Clarke School).

2210. **Herriott, F.** Diagnostic examination of mental patients on the psychodramatic stage. *Sociometry*, 1940, 3, 383-398.—The value of the psychodramatic method for diagnosis after a single visit is demonstrated by extended excerpts from the record of an examination for commitment by this technique. "When the interview method is replaced by the psychodramatic method, a more objective approach to the patient can be attained. On the stage, the patient spontaneously projects his delusional action-patterns. . . ." In addition "the patient becomes warmed up to his own delusions to a degree which makes him more communicative . . . the patient tends to reveal many details which would be left unrevealed without the stimulus of action."—*L. J. Stone* (Vassar).

2211. **Hesnard, A.** Les conduites de culpabilité. (Guilt behavior.) In Various, *Mélanges Pierre Janet*. Paris: Editions d'Artrey, 1939. Pp. 101-111.—Patients in this category have the feeling that they themselves and the external world have both suffered a loss in value. Consequently they experience guilt feelings and try (though without success) to justify or defend themselves and sometimes even to inflict self-punishment. This behavior, connected with morbid feelings of moral inferiority, is found in all forms of psychoses and neuroses. Manifestations in neuroses are anxiety, psychasthenia, phobias, obsessions, and hysteria. Although a tendency to deny the guilt and to offer resistance to accusations is found in both neuroses and psychoses, it is only in the latter that we find a tendency to suppress guilt feelings in preference to attempting to justify a given behavior. The psychosis accordingly becomes a retreat from an unhappy social situation, as illustrated in manic-depressive cases, chronic delusions, and schizophrenia. All morbid behavior is interpreted as reactions to disappointments in the patient's life, due to his inability to pursue a given moral action to its successful conclusion. As a result, he takes refuge in an imaginary culpability which demands less effort than did the original moral situation.—*C. Nony* (Sorbonne).

2212. **Hincks, C. M.** War work in Canada. *Ment. Hyg.*, N. Y., 1941, 25, 10-13.—Except where



medical officers are very much interested in the individual welfare of their men, or where they are psychiatrically trained, there is likely to be delay in psychiatric diagnosis or in beginning treatment where such is necessary, and neglect in preventive mental hygiene activities, such as counseling, giving morale or mental-hygiene talks, and paying attention to controllable factors affecting adjustment. Psychological testing is not routine procedure, except with one division of the air force, but is available upon request of a commanding officer.—*W. L. Wilkins* (Milwaukee, Wis.).

2213. **Humphreys, E. J.** Psychopathic personality among the mentally defective. *Psychiat. Quart.*, 1940, 14, 231-247.—Comparison of the mental integrations of psychopathic defectives and superior psychopaths, based on a review of 60 cases and a survey of the literature, suggests that the psychopathic defective suffers from developmental arrests in conational, temperamental, affective-emotional, and characterial integrations in a manner essentially similar to that in superior psychopaths. The intellectual integrations merely give color and direction to the individual's energies. Early social treatment might have turned these energies more constructively. Society has as yet made no solution for the problems of the superior psychopath, and in the state schools, organized for the more socially innocuous defectives, separate provision should be made for the handling of the psychopathic defectives.—*R. C. Moore* (Boston Psychopathic Hospital).

2214. **Jagerschmidt, P.** Le traitement dans les états d'arriération mentale. (Treatment in states of mental retardation.) Lyon: (Dissertation), 1939. Pp. 156.

2215. **Kamm, B. A.** Schizophrenia and compulsion neurosis. *Bull. Menninger Clin.*, 1941, 5, 20-27.—"The differential diagnosis of schizophrenia and compulsion neurosis is discussed by presenting two borderline cases. The schizophrenic ego-defect which shows up in the quality of a patient's emotions, his type of thinking, and his pattern of behavior is demonstrated as the essential point for the nosological differentiation of these two groups."—*W. A. Varvel* (Chicago).

2216. **Kanzer, M.** Early stages of language dissolution in aphasia. *Trans. Amer. neurol. Ass.*, 1940, 66, 186-188.—Abstract and discussion.

2217. **Kelley, D. McG., Margulies, H., & Barrera, S.** The stability of the Rorschach method as demonstrated in electric convulsive therapy cases. *Rorschach Res. Exch.*, 1941, 5, 44-48.—Protocols were obtained from 12 individuals showing varying clinical syndromes, but all under electric shock therapy and all showing amnesia without confusion after shock. Protocols were obtained just before and just after one shock treatment. The subjects showed no clinical psychiatric changes (after one treatment) and no changes in the fundamental Rorschach pattern. Some changes did occur in number of responses, *D*, *F*%, percent of responses in cards VIII, IX, and X, and *P* responses. The authors

conclude that these areas and determinants are "less important from a quantitative point of view than the other determinants." Long range studies on completely treated cases are suggested.—*R. Horowitz* (New York City).

2218. **Kindwall, J. A., & Kinder, E. F.** Postscript on a benign psychosis. *Psychiatry*, 1940, 3, 527-534.

—This paper is a collaboration between a physician and a patient, who together offer a report of a cooperative method of studying a psychosis, "wherein the subjective, retrospective account of a patient trained in psychological methods and acquainted with the field of psychopathology, has been used to supplement the record of the hospital. Out of a mass of available material, certain data bearing on the problem of management have been selected for a preliminary report. Comparison of subjective and objective records reveals how management was conditioned by a strong resentment that could be traced through the various stages of the psychosis. In the practical management of the case, attitudes among the hospital personnel seem to have been a factor having considerable psychotherapeutic significance. . . . It is suggested that other studies, affording further data on these matters, confirmatory or otherwise, may bring into clearer focus factors in psychiatric procedure which assist, or which retard, the processes making for recovery." Appended is a discussion by Adolph Meyer, who comments upon the positive psychiatric values of such a combined subjective-objective study, the lessons to be learned in the handling of patients, and the importance of such studies in correcting public attitudes toward mental illness. Bibliographies of the authors' writings are given on pp. 609-610.—*M. H. Erickson* (Eloise Hospital).

2219. **Klein, F.** Maladies mentales expérimentales. (Experimental mental diseases.) Paris: (Dissertation), 1937. Pp. 234.

2220. **Kraines, S. H.** The therapy of the neuroses and psychoses. Philadelphia: Lea & Febiger, 1941. Pp. 512. \$5.50.—The author presents for the psychiatrist and the physician a compend of his experience in the handling of psychiatric conditions. The work is intended as a pragmatic statement of "the factors underlying the formation of nervous and mental diseases and their treatment," with detailed discussion of the sociological, psychological, and biological considerations involved in each type of condition and of the problems of resynthesis of the personality. Case material is cited extensively and a cross-reference footnote system is employed by which the reader is referred from one page to another throughout the book. An index is given. Foreword by Adolf Meyer.—*M. H. Erickson* (Eloise Hospital).

2221. **Kubie, L. S.** The repetitive core of neurosis. *Psychoanal. Quart.*, 1941, 10, 23-43.—The author develops his previous discussion of repetition compulsion (see XIV: 1843) in relation to the following considerations: (1) All psychological phenomena are necessarily repetitive. (2) All neurotic phe-

nomena are a distortion of this normal repetitiveness. (3) Therefore all neuroses are necessarily obligatory repetitions in which the repetitive mechanism has singled out for emphasis one or another manifestation. (4) The obsessional compulsion neurosis and the perversions are merely special cases of neurotic distortion of normal repetitiveness. (5) There is, then, a need to revise analytic conceptions of dynamic mechanisms specific for obsessional symptomatology, since they constitute special examples of a more general process. These considerations are then developed in relation to their physiological basis, the normal repetitiveness in psychic life, the possible role of organic forces, the pathological distortion of normal repetitiveness, the antitheses in neurotic symptoms, the sequence from compulsion to obsession, the focus of repetition in the choice of neurosis, and nosological significations. An 8-item bibliography is given.—*M. H. Erickson* (Eloise Hospital).

2222. Lang, T. **Vierter Beitrag zur Frage nach der genetischen Bedingtheit der Homosexualität.** (Fourth contribution to the problem of the genetic determination of homosexuality.) *Z. ges. Neurol. Psychiat.*, 1939, 166, 255-270.—[Abstracted review; original not seen.] Among siblings of male homosexuals the ratio of brothers to sisters is about 135:100, whereas in the normal population it is about 106:100. These findings from Hamburg on 500 cases confirm previous ones from Munich (see XIV: 6001). They are taken as an indication that these homosexuals have genetically a greater than normal share of female characteristics.—*H. L. Ansbacher* (Brown).

2223. Larsby, H., & Lindgren, E. **Encephalographic examinations of 125 institutional epileptics.** *Acta psychiat. Kbh.*, 1940, 15, 337-351.—The investigation of 125 epileptics by encephalographic examination indicates: (1) cisternal puncture is to be preferred to lumbar puncture, since it insures a better filling of the ventricular system without having given (in this material) a less adequate filling of the convexity; (2) anatomical changes occurred, both in the form of dilated ventricles (59 cases) and in the form of enlarged sulci on the convexity (17 cases), while in 30 cases there were no demonstrable encephalographic changes; (3) with prolongation of the disease there is a tendency for a higher percentage of pathological cases; (4) no connection exists between mental changes and the encephalogram. The procedures for estimating encephalograms are given. Bibliography.—*R. K. Meister* (Mooseheart Laboratory for Child Research).

2224. Lindemann, E., & Finesinger, J. E. **Analysis of the subjective responses of psychoneurotic patients to the (intramuscular) administration of adrenalin, mecholyl (acetyl-B-methyl-choline) and saline.** *Trans. Amer. neurol. Ass.*, 1940, 66, 147-150.—Abstract and discussion. (See XV: 881).

2225. Lundholm, H. **A new laboratory neurosis.** *Character & Pers.*, 1940, 9, 111-121.—In 1933 (see VIII: 1701) the following hypothesis was offered. The hypnotic suggestion of an anesthesia causes the

subject to act as if the disorder existed. During post-hypnotic amnesia, this tendency functions as a subconscious compulsion to inhibit all related reactions; all impressions concerned are rendered meaningless. In the present study, this hypothesis is broadened to apply to the suggestion of any disorder of sense perception. From this a proposition concerning hallucination is derived. A person faced by a subconscious compulsion to react as if impressions actually reached a certain sensory area, will hallucinate such impressions. Illustrative laboratory neuroses are cited. Clinical applications of the theory in all of its implications are possible.—*M. O. Wilson* (Oklahoma).

2226. Lutz, J. **Über die Schizophrenie im Kindesalter.** (Schizophrenia in childhood.) Zürich: (Dissertation), 1937. P. 64.

2227. Meyer, J. E. **Über organische Hirnschäden und den Verfall der sittlichen Haltung.** (Organic brain lesions and degeneration of moral conduct.) *Arch. Psychiat. Nervenkr.*, 1940, 112, 368-384.—Meyer reviews the German literature and reports 3 clinical cases in young women, associated, respectively, with concussion, epidemic encephalitis, and probable tumor. Ethical conduct is composed of will, affectivity, intelligence, memory, and instinct, the integrity of which is largely essential to morality. These separate functions are localized in the cortex and especially in the midbrain. According to the significance of these factors within the clinical picture, the decline of moral behavior is either focal for the entire personality or only a by-product.—*M. E. Morse* (Baltimore, Md.).

2228. Moore, M., & Gray, M. G. **Drugs as a factor in the production of mental diseases.** *J. crim. Psychopath.*, 1941, 2, 271-295.—Data on 124 patients, admitted to the Boston Psychopathic Hospital between 1920 and 1932 for psychosis due to drugs and other exogenous toxins (excluding the alcoholic psychoses), are reviewed. The total number of such cases admitted in this period was 222 or 0.97% of all admissions. The average annual ratio of admissions for alcoholic psychoses (7.8%) is 8 times as great as for the drug psychoses. There were twice as many males than females in the series; 71.7% of the patients were between 30 and 49 years of age at the time of admission. Habitual use of drugs was reported by 62.6% of the patients with sleeplessness, depressed condition, and sexual, marital, or financial difficulties as the most common reasons given for their use. Barbiturates and morphine (usually in combination with alcohol or another toxic substance) were most commonly used. Because of the low incidence of a favorable prognosis for these psychoses, the authors conclude that "the problem of drug psychoses is relatively unimportant compared to that of the psychoses arising from alcoholism."—*A. Chapanis* (Yale).

2229. Morgan, C., & Waldman, H. **"Conflict" and audiogenic seizures.** *J. comp. Psychol.*, 1941, 31, 1-11.—It is suggested that auditory stimulation, rather than a conflict situation, accounts for Maier's

original results on neurotic behavior. A Galton whistle connected to a compressor was the sound source. Rats which had seizures when stimulated with the whistle and those which did not were tested in conflict and non-conflict situations. Those not having seizures in response to sound also failed to have them in the conflict situation. Frequency of seizures in other rats were not increased by conflict. In another test, shock was used as a forcing device. This did not lead to seizures in rats which had not previously exhibited them. Nor did it increase the frequency of seizures in other rats. In a further experiment the influence of the distance between sound-source and animal was tested. Nearness of the sound was shown to be quite important in determining the incidence of seizures. Maier's observation of a greater incidence of seizures in conflict than in other situations is, according to the present investigators, due to the fact that the conflict situation had a sound source within a few inches and the non-conflict situation a sound source 8 feet from the rats. It is claimed that "seizures have never been produced in the absence of an acoustic stimulus." The term audiogenic seizure is suggested as a proper designation.—*N. L. Munn (Vanderbilt).*

2230. Mudd, E. H., Freeman, C. H., & Rose, E. K. *Premarital counseling in the Philadelphia Marriage Counsel.* *Ment. Hyg., N. Y., 1941, 25, 98-119.*—From a study of 200 cases data are given on age, religion, education, source of referral, fees paid, questions asked by the clients, and types of advice given. 37 of the 200 cases paid return visits after marriage, of whom 22 seemed well adjusted. Indirect reports concerning 45 others indicated that 43 of these seemed well adjusted.—*W. L. Wilkins (Milwaukee, Wis.).*

2231. Myers, C. S. *Shell shock in France 1914-1918.* Cambridge; New York: University Press; Macmillan, 1940. Pp. xi + 146. \$1.25.—This book concerns the author's personal experiences in diagnosing and treating shell shock in France and in the British Isles. The work is based on his diary. The author's chief concern is to show the administrative and other difficulties which arose as the concept of shell shock grew, yet was incompletely understood by many who were charged with providing hospitalization for the afflicted. The hope is expressed that the book will help to prevent some of those mistakes from being made again. The author outlines his view of the psychopathology and psychotherapy of this condition.—*I. C. Nichols (Butler Hospital).*

2232. Oberndorf, C. P. *Treatment of mental disease in France at the end of the eighteenth century.* *Bull. N. Y. Acad. Med., 1940, 16, 670-678.*

2233. Ojemann, R. H. *Adjustment in the community.* *Rev. educ. Res., 1940, 10, 429-434.*—This is a review of the literature organized under the headings: mental hygiene effects of leisure-time activities, effect of economic depression and unemployment, influence of mores and traditions,

motion pictures, radio. The bibliography includes 82 titles.—*M. Keller (Butler Hospital).*

2234. Page, J. D. *Studies in electrically induced convulsions in animals.* *J. comp. Psychol., 1941, 31, 181-194.*—Convulsions similar to those found in human epilepsy were produced in rats and cats by electrical stimulation of the intact cortex. Attempts to condition these to the sound of a bell met with failure. Emotional excitement elicited by the sound of an air blast or adrenalin injections did not affect the amount of shock necessary to produce convulsions in rats. Injections of 1.00 cc. of alcohol in rats raised resistance to shock. Smaller amounts had no noticeable effect. Marked personality changes (loss of weight, passivity, inactivity, tremor, etc.) resulted from repeated convulsions. Implications of these findings for shock therapy and epilepsy are discussed.—*N. L. Munn (Vanderbilt).*

2235. Patterson, R. M. *The pre-psychotic personality.* *Rev. educ. Res., 1940, 10, 460-463.*—A review of the literature and bibliography of 36 titles.—*M. Keller (Butler Hospital).*

2236. Patton, R. A. *The effect of vitamins on convulsive seizures in rats subjected to auditory stimulation.* *J. comp. Psychol., 1941, 31, 215-221.*—Of 16 rats which manifested seizures regularly when subjected to the sound of a buzzer on a tuning fork resonator, 8 were given thiamine. Further tests over a period of two weeks showed a decrease in the incidence of seizures in these animals and no change in the seizures of the control group. A similar experiment with 16 new rats divided into control and experimental groups involved vitamins B<sub>1</sub>, B<sub>2</sub>, and B<sub>6</sub>. In 10 subsequent daily tests the experimental group had 48 seizures to 80 for the control group. A further experiment on new animals, 8 of which were fed Brewer's yeast, yielded similar results, the experimental group having 74 seizures to 112 exhibited by the controls.—*N. L. Munn (Vanderbilt).*

2237. Patton, R. A., & Karn, H. W. *Abnormal behavior in rats subjected to repeated auditory stimulation.* *J. comp. Psychol., 1941, 31, 43-46.*—An electric buzzer was used to produce behavior disturbances like those designated by Maier as neurotic. Out of a large number of rats, 10 exhibited such behavior. These were stimulated daily over a period of 4 weeks. During this period the weekly incidence of seizures was not reduced. These results are not consonant with those of Maier which indicated adaptation. "If differences in conditions of testing are not important, then the discrepancy between the two sets of data would seem to mean that some uncontrolled or unreported factors are operating.—*N. L. Munn (Vanderbilt).*

2238. Pickford, R. W. *Three related experiences of déjà vu.* *Character & Pers., 1940, 9, 153-159.*—The instances of *déjà vu* are described and interpreted. Support is found for MacCurdy's hypothesis that such paramnesias are closely related to the state of perplexity. Therefore, the affect is dominantly unpleasant. However, the unpleasantness



in these particular instances is partly masked off, because the paramnesias are images of unconscious strivings which are compensatory.—*M. O. Wilson* (Oklahoma).

2239. Piotrowski, Z. A simple experimental device for the prediction of outcome of insulin treatment in schizophrenia. *Psychiat. Quart.*, 1940, 14, 267-273.—Analysis of pre-treatment Rorschach records from a group of 94 schizophrenics shows that many more of the patients who improved under insulin treatment gave meaningful color interpretations than did those who were unimproved after insulin, and that no patient who failed to give a meaningful color response recovered or greatly improved. The same relationship is seen in the production of human movement interpretations, but to a lesser degree. The presence of both meaningful color and good human movement responses in a record appreciably strengthens the possibility for improvement under insulin. Some follow-up data further substantiates the prognostic value of the color response. The author suggests that, if insulin treatment is given to those schizophrenics only who show meaningful color responses, the improved cases will reach 81%, that all patients potentially recoverable will be included, and that a certain percentage of patients who would improve but slightly and only temporarily would be eliminated.—*R. C. Moore* (Boston Psychopathic Hospital).

2240. Pittenger, K. A study of the duration of temporal intervals between successive moments of stuttering. *J. Speech Disorders*, 1940, 5, 333-341.—20 stutterers read a 1000 word test passage while under the observation of two unseen observers. The observers recorded both the frequency and the duration of stuttering spasms. The purpose of the investigation was to determine the degree of variability between successive moments of stuttering, and to point out any cyclic pattern recurrent in the stuttering spasms. The results show a marked variability in temporal intervals, both for individual subjects and for the group as a whole. No cyclic patterns appeared. It is concluded that stuttering is either functional in origin, or that it arises out of some organic condition which does not produce regular recurring phenomena.—*C. V. Hudgins* (Clarke School).

2241. Plant, J. S. The warp and woof of mental hygiene. *Ment. Hyg., N. Y.*, 1941, 25, 25-29.—There are 4 threads to the warp of mental hygiene: (1) we must try to understand conduct rather than be irritated by it; (2) we must give reassurance as to what are the real things that are happening; (3) we must emphasize proper balance between the intellectual and the emotional, between techniques and attitudes; (4) we must counsel courage and faith in the democratization of values.—*W. L. Wilkins* (Milwaukee, Wis.).

2242. Régis, L. M., Barbeau, A., Webster, E. C., Mailloux, N., Bills, A. G., Marcotte, A., & Long, J. A. L'hygiène mentale et l'éducation. (Mental hygiene and education.) Ottawa, Canada: Les

Éditions du Lévrier, Collège Philosophique et Théologique des Dominicains, 1940. Pp. 187.—[Abstracted review; original not seen.] This volume is the first annual report of a new association initiated by members of the Dominican Order for the study of scientific methods in education. The papers are both scientific and philosophical in approach. The topics considered are criminology, sexuality, personality and character, fatigue, the practice of mental hygiene in the school, and the rôle of the teacher in popular education.—*D. E. Johannsen* (Skidmore).

2243. Reider, N. A note on the influence of early training on the development of aphasic manifestations. *Bull. Menninger Clin.*, 1941, 5, 1-4.—A brief discussion of regressive manifestations in aphasia oriented with reference to a patient who had learned sign language from a deaf-mute mother before he learned to speak. Before death the patient lost all powers of verbal speech but could continue to communicate with his hands.—*W. A. Varvel* (Chicago).

2244. Rich, G. J. Treatment of enuresis by the conditioning technique. *J. nerv. ment. Dis.*, 1941, 93, 367.—Abstract.

2245. Riemer, M. D. Ideas of neglect and hoarding in the senile psychoses. *Psychiat. Quart.*, 1940, 14, 285-288.—"The senile, having suffered irreparable organic damage, manifests inordinate narcissism or childishness, which takes the form of ideas of neglect and of hoarding tendencies."—*R. C. Moore* (Boston Psychopathic Hospital).

2246. Schilder, P. The structure of obsessions and compulsions. *Psychiatry*, 1940, 3, 549-560.—Although psychoanalysis recognizes consciousness and motility as the nucleus of the ego, primitive motor function in connection with ego problems has been neglected, especially in regard to obsessions and compulsions. In these conditions, the author has found motor factors of significant psychological importance, since they show the relations of drives to perception and also constitute an excellent approach to the therapeutic problems involved. The author elaborates these findings on the basis of material derived from 20 patients treated by group or individual analysis for a minimum of several months. This material he discusses under the headings: the motor drives; balance and the outward world; thoughts; some ideas of obsession neurotics; the symbolism of motor drives; the evidence for the increase of motor drives; activity, aggression, and sadism; obsessions and compulsions by internal drives; the symbolism of internal drives in relation to motility; the genesis of aggression; guilt feelings; the state of consciousness; the obsessive character and the impulsions; and therapy. A bibliography of the author's writings is given on pp. 611-617.—*M. H. Erickson* (Eloise Hospital).

2247. Singeisen, F. Rorschachbefunde bei chronisch Lungentuberkulösen und Herzkranken. (Rorschach findings in patients with chronic pulmonary tuberculosis and heart disease.) *Schweiz. Arch.*

*Neurol. Psychiat.*, 1940, 45, 230-247.—M. E. Morse (Baltimore, Md.).

2248. Steckel, H. A. Psychiatric aspects of the national defense program. *Ment. Hyg., N. Y.*, 1941, 25, 13-18.—The Military Mobilization Committee of the American Psychiatric Association surveyed the need for psychiatric service in the armed forces and the availability of such service in terms of presently available trained practitioners. It is concluded that there would be an ample supply of trained psychiatrists for a maximum effort of an army of four million men.—W. L. Wilkins (Milwaukee, Wis.).

2249. Stevenson, G. S. Trends in mental hygiene. *Rev. educ. Res.*, 1940, 10, 407-413.—The following topics are discussed: mental hygiene and democratic principles, mental hygiene and education, morale of teachers, child psychiatry, mental hygiene in industry, medical and social opportunities for mental hygiene, legal and court practices, and coordination and progress.—M. Keller (Butler Hospital).

2250. Strang, R. Technics and instruments of mental hygiene diagnosis and therapy. *Rev. educ. Res.*, 1940, 10, 450-459.—The literature for the period from December, 1936 to July, 1940 is reviewed under the following headings: concepts and principles of mental hygiene; diagnosis; and therapy. The subheadings under therapy are: consultation and suggestion therapy, change of environment as treatment, educational therapy, group activities as a method of psychotherapy, play therapy, art therapy, occupational therapy, illustrative case studies and specific descriptions, and appraisal of the effects of treatment. The bibliography includes 100 titles.—M. Keller (Butler Hospital).

2251. Sullivan, H. S. Psychiatry in the emergency. *Ment. Hyg., N. Y.*, 1941, 25, 5-10.—Psychiatry's tasks in the national emergency are: (1) Leadership in the attempt to "defeat the assault by terror and personal disintegration and the destructive utilization of all knowledge." (2) The everyday problems of building security, not only by service to the armed forces but also by service to general morale. (3) Assistance in the "suppression of unwitting or involuntary giving of aid and comfort to the enemy by persons who are suffering from mental defect or disorder."—W. L. Wilkins (Milwaukee, Wis.).

2252. Varvel, W. A. The Rorschach test in psychotic and neurotic depressions. *Bull. Menninger Clin.*, 1941, 5, 5-12.—Statistical data from the Rorschach test are presented for 7 manic-depressive depressions, 13 neurotic and reactive depressions, and 14 agitated depressions and depressions with schizophrenic features. Comparisons are made to norms derived from 144 college students. There is a close relationship between limited perceptual organization (closure) and the constricted personality. "Constriction found in socially normal individuals may be regarded as a fundamental characterological deviation while that of the depressives may or may

not be typical of their pre-psychotic personalities."—W. A. Varvel (Chicago).

2253. Wechsler, D., Halpern, F., & Jaros, E. Psychometric study of insulin-treated schizophrenics. *Psychiat. Quart.*, 1940, 14, 466-476.—To investigate whether changes in the clinical pictures of schizophrenics following insulin treatment were accompanied by changes in intellectual functioning, and whether such differences might be of prognostic significance, a battery of selected psychometric tests was given to a group of patients before and after termination of insulin therapy. Score changes were noted, and coefficients of correlation between test score differences and psychiatric ratings of clinical condition 6-12 months after completion of treatment were calculated, as was the percentage of correspondence. The battery then seen to have the greatest forecasting value for outcome of therapy included, in order of value: a vocational interests test, probably involving interest in the external world; a test of counting-by-3's, involving speed of association; a test of giving similarities, involving generalization and capacity to see the relative aspects of a situation; a directions test, possibly indicating freedom from preoccupation and associational disturbances; and a naming-of-words test, again involving speed of association. The prognostic value of the test score changes appeared greater than that of psychiatric rating of clinical condition at the end of treatment alone, with the further analysis of results suggesting that certain patients may be harmed rather than improved by insulin treatment.—R. C. Moore (Boston Psychopathic Hospital).

2254. Weindler, F. Das grosse Kulturbild der seelischen Volkskrankheiten im deutschen Mittelalter. (The general cultural picture of the psychic epidemics in the German Middle Ages.) *Psychiat.-neurol. Wschr.*, 1939, No. 38.—[Abstracted review, original not seen.] The epidemics of being possessed by the devil, the St. Vitus dance, and the flagellants were characteristic symptoms of the pathology of the collective mind of that period. These states were brought on by pestilence, frequent wars, and natural catastrophes. The victims of possession were characterized by extreme suggestibility, those of St. Vitus dance by mania and agitated catatonia, and the flagellants by sadistic and schizophrenic tendencies. Such religious epidemics gradually deteriorated into immorality and were checked by the churches.—J. E. Bader (Brandon State School).

2255. Wile, I. S. Adult education as protective mental hygiene. *Ment. Hyg., N. Y.*, 1941, 25, 87-97.—W. L. Wilkins (Milwaukee, Wis.).

2256. Wise, C. A. The clergy and community education for mental hygiene. *Ment. Hyg., N. Y.*, 1941, 25, 30-42.—Both the ceremonial and the educational activities of the church can promote mental health. As an addition to the present theological curriculum a period of at least 12 weeks of clinical training is recommended, such training to be residence in a mental hospital, a general

hospital, or a correctional institution. Advantages of such clinical training are detailed.—W. L. Wilkins (Milwaukee, Wis.).

2257. Wulfeck, W. H. Motor function in the mentally disordered: III. Intra-individual consistency of expressive movement in psychotics, psychoneurotics, and normals. *J. Psychol.*, 1941, 11, 151-160.—50 normals, 25 manic-depressives, 23 schizophrenics, and 25 psychoneurotics were tested by a technique similar to that of Allport and Vernon for estimating the degree of intra-individual consistency of expressive movement. 8 tests of motor performance involving 15 variables were given in 3 trials on 3 successive days and test-retest reliabilities between results of sessions 2 and 3 employed as indices of consistency. The data revealed an average  $r$  of .80 for normals, .81 for manic-depressives, .71 for schizophrenics, and .75 for psychoneurotics. Examination of the range of correlations for each group showed that the differences among the groups were greater than the average correlations indicate, especially on certain tests.—F. A. Mole, Jr. (Connecticut).

2258. Zangwill, O. L. On a peculiarity of recognition in three cases of Korsakow's psychosis. *Brit. J. Psychol.*, 1941, 31, 230-248.—Illustrations are given of a hitherto unrecorded variety of paramnesia in 3 cases of alcoholic Korsakow psychosis. This paramnesia was essentially an expression of an incapacity to respond to identity, i.e. the patient was unable to recognize pictures, faces, rooms, objects, etc. as identical with those seen a short time previously, although they appeared to him similar. Possible causes of the phenomenon seemed to involve differential forgetting, transformation in recall, and deficient personal reference as the most important factors.—M. D. Vernon (Cambridge Univ.).

[See also abstracts 2065, 2093, 2099, 2140, 2156, 2164, 2265, 2275, 2316, 2318, 2322, 2325, 2328, 2336, 2342, 2368, 2402, 2405, 2406, 2409, 2414, 2416, 2422, 2435.]

#### PERSONALITY AND CHARACTER

2259. Adkins, D. C., & Kuder, G. F. The relation of primary mental abilities to activity preferences. *Psychometrika*, 1940, 5, 251-262.—The relations of abilities, as measured by Thurstone's Tests for Primary Mental Abilities, to activity preferences, as measured by Kuder's Preference Record, are investigated for a population of 512 university freshmen. Ability profiles for contrasted groups on each preference scale reveal relatively slight overlapping between the 2 sets of measures, although the apparent trends are reasonable. The Pearson inter-correlation coefficients of all pairs of measures involved were determined. Implications of the findings in relation to theory and to educational and vocational guidance are indicated.—(Courtesy *Psychometrika*).

2260. Crook, M. N. Retest correlations in neuroticism. *J. gen. Psychol.*, 1941, 24, 173-182.—

Retests were made with the Thurstone Personality Schedule at various intervals after the initial administration. Retest correlations declined in magnitude to about .50 at the longest interval (6.5 years). A negatively accelerated curve describes this decline; the number of cases for the 11 points on the curve varied from 18-200. 5 split-half reliability coefficients obtained from 5 groups of college students were slightly lower than the reliabilities reported by Thurstone. The decline in retest correlation is greater than that for intelligence and less than that for attitudes. Implications for the concept of reliability are discussed.—C. N. Cofer (George Washington).

2261. Dennison, C. P. Parenthood attitudes of college men. *J. Hered.*, 1940, 31, 527-531. Also in *Eugen. News*, 1940, 25, 65-69.—Questionnaire returns obtained from more than 400 Princeton alumni of the classes 1900, 1902, 1912, 1913, and 1921 disclose an average desire of 3.9 children per family as against an actual average of 2.4. Reasons for wanting children are not always crystallized in the minds of the parents, and those most commonly offered are not necessarily considered the most important by the raters. Companionship of young children and perpetuation of family head the list of reasons, but creation and development of new life is more often given as being an important reason. Discrepancy between family size and the ideal was accounted for chiefly by limited finances, physical hazards of childbirth, social restrictions put upon parenthood, and sterility. Actual family size varies with the income groups, the highest birth rate going to the highest income group. Occupational breakdown of the data accorded the largest family size to clergymen, the lowest to business men, big and little. Presumably, suggestion within the multiple choices allowed for responses is a factor in determining response as to motivation for parenthood.—G. C. Schwesinger (American Museum of Natural History).

2262. Eysenck, H. J. Some factors in the appreciation of poetry, and their relation to temperamental qualities. *Character & Pers.*, 1940, 9, 160-167.—In a study by Burt (see XIII: 3604, 5764) it was shown by factorial analysis that esthetic responses may be classified in accordance with emotional and temperamental characteristics. Similar results were found in the present study. Two bipolar factors, the simple-complex and the restrained-emotional, were differentiated. The simple-complex component correlated highly with intraversion-extroversion.—M. O. Wilson (Oklahoma).

2263. Garma, A. Ensayo de psicoanalisis de Arthur Rimbaud. (Psychoanalytic study of Arthur Rimbaud.) *Rev. Psiquiat. Crim., B. Aires*, 1940, 5, 167-200.—Rimbaud's life was a recurring pattern of: aggression with the special characteristics of inferiority feelings, impossibility or predestined failure, guilt feelings, and need of punishment; oral factors (parasitism, alcoholism); intense affective ambivalence; and unsuccessful attempts to gain normality by running away and living a free primitive life.



Although giving the impression of a timid, exemplary boy, his childhood phantasies were of aggression and rebellion. His precocious and intense masculine sexuality was markedly sado-masochistic with strong anal components. At puberty his phantasies centered around the death of love, especially of women. After the failure of his third running away, he deliberately reinforced his abnormalities, renounced heterosexual love, and defied social usages and religion. Later he transferred his conflicts from his mother to Verlaine, but his unfailing sense of reality caused him to break with the latter. In the last phase of his life his neurosis was "rationalized" by travels and gainful employment, thus becoming less glaring, but it was only a new triumph of sado-masochism, hunting for trouble, and ending in failure, unconsciously sought.—*M. E. Morse* (Baltimore, Md.).

2264. Hallowell, A. I. The Rorschach test as a tool for investigating cultural variables and individual differences in the study of personality in primitive societies. *Rorschach Res. Exch.*, 1941, 5, 31-34.—Several authors have commented on the influence of cultural factors on responses in the Rorschach test. Although these factors are present, they are of subordinate importance so long as one concentrates on the psychodiagnoses of individuals all belonging to the same culture. The test, however, may have possibilities as a tool in comparative social psychology to discover the influence of cultural variables on the mode, the quality, the content, and the originality of apperception. Attention to detail, awareness of color, sharpness in discrimination of form may be group variables related to cultural traditions. "It will probably be necessary to build up an adequate sample of the responses of individuals in any primitive society before the full significance of the individual response of members of this society can be fully exploited with respect to their psychodiagnostic import or successfully compared with the psychograms of individuals reared in occidental societies."—*R. Horowitz* (New York City).

2265. Hunt, R. C. The psyche as an object of hypochondriacal preoccupation. *Psychiat. Quart.*, 1940, 14, 490-495.—Four cases are cited, illustrating the thesis that some neurotic individuals may complain of spurious conflicts, complexes, or other mental symptoms, apart from imaginary physical symptoms. In such cases the preoccupation with psychic functions would seem dynamically identical with the usual hypochondrias, except that these hypochondriacs appear to overload with libido the psyche itself. Suggestions for detecting these spurious symptoms are offered, and comment is made relative to the implications for mental hygiene propaganda.—*R. C. Moore* (Boston Psychopathic Hospital).

2266. Kehl, R. *Psicologia da personalidade*. (Psychology of personality.) Rio de Janeiro: Libreria Alves, 1940. Pp. 307.—[Abstracted review; original not seen.] The author describes psychological characteristics under the headings of ordi-

nary personalities, special types of ordinary personalities, extra-ordinary personalities, and general complementary considerations. Modern psychology should attempt to understand the whole personality, including heredity and endocrinology.—*J. E. Bader* (Brandon State School).

2267. Krugman, M. Out of the ink-well: the Rorschach method. *Character & Pers.*, 1940, 9, 91-110. Also in *Rorschach Res. Exch.*, 1940, 4, 91-101.—Krugman gives a brief history of the Rorschach method, indicates the areas within which it has been used, and outlines some of the problems in its development yet to be solved. 171 references are cited, 11 pre-Rorschach, 11 general, and the remainder supplementary to the bibliographies of 1933 and 1935 by Vernon. Some 25 areas within which the method has been used are pointed out, such as juvenile delinquency, vocational guidance, stuttering, manic-depressive psychoses, personality traits, adolescence, etc. The problems enumerated are: better validation, norms for every major population group, construction of equivalent forms, age norms for children, and limitation of the use of the method to qualified workers. Qualifications include broad experience in psychopathology and in the use of the method with many clinical groups and training in the Rorschach-Oberholzer tradition (the latter being the leading living exponent). Although some authorities hold that being psychoanalyzed is essential, Krugman feels that it is merely desirable.—*M. O. Wilson* (Oklahoma).

2268. Leger, G. *La constitution hyperémotive*. (The hyper-emotional constitution.) Lyon: (Dissertation), 1939. Pp. 256.

2269. Lowenfeld, H. Psychic trauma and productive experience in the artist. *Psychoanal. Quart.*, 1941, 10, 116-130.—From the analysis of a woman artist, the author concludes that susceptibility to trauma, a strong tendency to identification, narcissism, and bisexuality are related phenomena, with heightened bisexuality constituting the basis of the drive to artistic achievement. Traumatophilia compels a repetitive seeking of trauma; latent frustration enriches fantasy production; and the urge to identification appears as a sublimation of the bisexuality. Hence, the frequency of neuroses in artists may be related to their bisexuality, with freedom from neuroses dependent upon artistic sublimation of their conflicts. There is a 24-item bibliography.—*M. H. Erickson* (Eloise Hospital).

2270. Middleton, W. C. The relation of height and weight measurements to certain personality qualities as measured by the Bernreuter Inventory. *J. Psychol.*, 1941, 11, 143-150.—490 DePauw University freshmen, both men and women, were given the Bernreuter Personality Inventory two weeks after height and weight measurements had been secured as part of the routine physical examination of all freshmen. Intelligence scores on the American Council on Education Psychological Examination were also available for these subjects,

and correlations between intelligence and the physical measurements were found. When correlations were made between height and the personality qualities or weight and the personality qualities, the only relationship found for men was a tendency for heavy men to be extroverted. Tall women tended to be neurotic, self-sufficient, introverted, dominant, self-conscious, and slightly non-social; heavy women tended to be well balanced, lacking in self-sufficiency, slightly extroverted, slightly submissive, self-conscious, and slightly social.—*F. A. Mote, Jr.* (Connecticut).

2271. Minkowski, E. *La droiture*. (Straight-forwardness.) In Various, *Mélanges Pierre Janet*. Paris: Editions d'Artrey, 1939. Pp. 169-181.—The concept of the straight line is found in numerous common expressions, such as, straight to the goal, a straight road, and to stand straight, while moral values are also implied in various other geometric expressions, e.g., the better road is the shorter one. We think of the straight road, the truth, and the good as norms and as essential values in life, while we consider their opposites not only as formal contradictions but as synonyms for all that is bad and abnormal.—*C. Nony* (Sorbonne).

2272. Reis, H. *Die Handschrift—dein Character*. (Handwriting and your character.) Bad Homburg: Siemens, 1940. Pp. 124. RM 4.50.—[Abstracted review; original not seen.] This is a popular guide to the interpretation of handwriting, rather than a scientific treatise on graphology; nevertheless, it contains much of value not only to the beginner but to the advanced student.—*M. E. Morse* (Baltimore, Md.).

2273. Riemer, M. D. *Misanthropic delusions, attitudes, and associated character anomalies*. *Psychiat. Quart.*, 1940, 14, 556-567.—Falling between the normal and the psychotic with delusions of persecution is the misanthrope, not clearly identified as abnormal, whose ideation involves a misanthropic reaction towards everyone. The character of such a person shows the anomalous traits of hypersensitivity, doubting, megalomaniacal fantasies, faultfinding, and relative inaccessibility. The objective of the symptomatology is the protection of the sufferer from the great mass of inimical humans. The misanthrope is seen to contain within himself much aggression, which he projects on to the outside world. He is seen as extremely narcissistic, unable to withstand frustration, and unable to divert his aggression into more acceptable channels. The total personality is engaged in an attempt to satisfy the immediate egocentric demands. The mechanisms coming under this symptomatology may be grouped as protection gained by warding off inimical agents, increase in self esteem, projection of hostility, inability to divert aggressiveness, the symptoms and traits as vehicles for hostility, and narcissistic needs.—*R. C. Moore* (Boston Psychopathic Hospital).

2274. Salter, M. D. *An evaluation of adjustment based upon the concept of security*. *Univ. Toronto*

*Stud. Child Developm.*, 1940, No. 18. Pp. 72.—"This investigation is intended as the first step of a larger study, the purpose of which is to provide an evaluation of various important aspects of an individual's adjustment by means of a series of scales all based upon the common concept of security." The details are given of the construction of such scales in 2 situations. The results show that "the scales . . . give an evaluation of adjustment which is descriptively significant as well as being quantitatively reliable. The quantitative scores themselves provide a succinct basis of describing the individual pattern of adjustment, while the actual endorsements supply the data for a detailed elaboration of this pattern to aid in diagnosis."—*F. W. Finger* (Brown).

2275. Wall, J. A. *Significant factors in the readjustment of women patients with masculine tendencies*. *Psychiat. Quart.*, 1940, 14, 504-512.—Discussion from case material.—*R. C. Moore* (Boston Psychopathic Hospital).

2276. Winslow, C. N. *The comparative approach to typology*. *J. gen. Psychol.*, 1941, 24, 39-48.—Two methodological and interpretative errors have been made by typologists interested in animals. One is the false analogy which leads to the belief that, if a personality trait and a physical feature appear together in one case, the physical feature will represent the same trait in other animals. The second error, made especially often by the anecdotalists, is that of anthropomorphism. Observations made by several investigators on the personalities of animals are summarized, and suggestions for further research are made. 21 references.—*C. N. Cofer* (George Washington).

[See also abstracts 2179, 2196, 2206, 2207, 2213, 2235, 2252, 2289, 2319, 2332, 2347, 2359, 2366, 2373, 2393, 2396, 2413, 2414, 2417, 2421, 2425.]

#### GENERAL SOCIAL PROCESSES

(incl. Esthetics)

2277. Adinarayaniah, S. P. *A research in colour prejudice*. *Brit. J. Psychol.*, 1941, 31, 217-229.—Vetter's attitude scale, Bogardus' social distance test, and Freyd's introversion-extraversion test were completed by 175 British people aged over 18 (50 of them students) and 30 French students aged over 17. It was found that there seemed to be a relation between liberalism and colour (race) prejudice, but no relation between introversion and race prejudice nor introversion and liberalism. Race prejudice was greater among the French than among the British students, but less among the French students than among the British non-student public. Attitudes toward various coloured groups differed; the least prejudice was found against East Indians.—*M. D. Vernon* (Cambridge Univ.).

2278. Alpert, H. *Emile Durkheim and the theory of social integration*. *J. soc. Phil.*, 1941, 6, 172-184.—Many sociologists have believed in the reality of social unity. In analyzing the nature of that unity,

Durkheim held that there were two modes of social integration: (1) an "integration based on participation in a community of beliefs and sentiments" (a mechanical solidarity based on likeness with individuals tending to be only reflections of the collective type), and (2) an "integration in terms of functional interdependence" (an organic solidarity based on complementary differences and specialization). It is pointed out that Maine, Spencer, and Tönnies arrive at similar solutions to the problem of social cohesion.—*W. A. Varvel* (Chicago).

2279. [Anon.] **The William Alanson White Psychiatric Foundation Memorandum: Propaganda and censorship.** *Psychiatry*, 1940, 3, 628-632.—Propaganda includes the use of impressive rather than informative action, of demonstrations of prestige and privilege, of spectacles, parades and rituals, and of carefully timed actions of mercy, preferment, repudiation, or violence. There is also a use of esthetic symbols, especially posters, cartoons, drama, music, and fiction. Censorship constitutes a deliberate interference with communication. To distinguish propaganda and censorship from educational activities, a conception of achieving conformity to conventional values as contrasted with attempts by the minority to control mass valuational attitudes may be used. All propagandistic and censoring activities which tend to universalize conventional standards of value are education, and hence manifestations of social forces, while other similar activities constitute pressure by minority groups. There follows a discussion of these general ideas.—*M. H. Erickson* (Eloise Hospital).

2280. **Ashley-Montagu, M. F. Problems and methods relating to the study of race.** *Psychiatry*, 1940, 3, 493-506.—The author offers a philosophical discussion of problems and methods relating to the study of race, and then proceeds to a consideration of the factors of economics and stratification. These, he feels, are genetic forces in the development of race prejudice and aggressive behavior. Discussion is then given of psychological factors, which he feels have been consistently overlooked in studies of the racial problem, particularly the factors of psychophysical and psychological traits of the individual. He concludes with a discussion of biological facts concerning race as a problem, and offers the opinion that genetics discloses that the race problem is not a biological but rather a social problem. A bibliography of the author's writings is given on pp. 601-608.—*M. H. Erickson* (Eloise Hospital).

2281. **Beaglehole, E. Notes on the theory of interpersonal relations.** *Psychiatry*, 1940, 3, 511-526.—H. S. Sullivan's theory of interpersonal relationships (see XIV: 4632) is of importance not only for psychiatry, but also for the social sciences, particularly social psychology, sociology, and anthropology. The application to these specific fields, however, requires an elaboration, clarification, and further development of many aspects and considerations. These needs are discussed in relation to the classification of interpersonal phenomena, the nature of empathic observation, acculturation, the self dynam-

ism, the nature of love, the situation, dreams, the classification of syndromes, communication and parataxic integrations, the interview, the study of interpersonal situations, memory and recall, sublimation, analysis of the social rebel, and decision and choice. Sullivan's theory avoids neurologizing on the one hand and flights of metaphysical fancy on the other; it is important to the social scientist because it constitutes a generalized theory of the individual and his group that seems capable of reorienting many conceptualizations of the social sciences.—*M. H. Erickson* (Eloise Hospital).

2282. **Carpenter, C. R. A field study in Siam of the behavior and social relations of the gibbon (*Hylobates lar*).** *Comp. Psychol. Monogr.*, 1940, 16, No. 5. Pp. 212.—The place of the gibbon among the primates is discussed in an introductory chapter by Adolph A. Schultz. This is illustrated with a diagram showing the hypothetical pedigree of the higher primates. After discussing the Asiatic Primate Expedition, equipment, and procedures, Carpenter presents the results of his observations on individual and social behavior in the gibbon. Especial emphasis is given to such factors as population, intra- and inter-group relations, territoriality, group coordination, social control, and integration. The general findings are brought together in an 8-page summary. 20 plates illustrate various aspects of the habitat, the structure, and behavior of gibbons. The bibliography comprises 121 references. There is a comprehensive index.—*N. L. Munn* (Vanderbilt).

2283. **Donner, A. N. A survey of students' concepts concerning lost and found property.** *J. educ. Res.*, 1941, 34, 288-299.—A multiple-choice questionnaire was devised to test students' concepts regarding law cases, correct action, and state laws relating to lost and found property. The questionnaire was administered to 1032 boys and 1156 girls, 10-20 years old,  $\frac{2}{3}$  from Iowa and  $\frac{1}{3}$  from Texas. Although the students do not have the statute information, 86% of the students' judgments correspond with court decisions. Still, 14% report judgments which would entail punishment by law and accept certain behavior actions which are neither socially accepted nor legally approved. Further analysis of the data reveals statistically significant racial and geographical differences. Thus the judgment of Iowa white students shows a closer correspondence with court decisions than that of Texas students.—*S. W. Fernberger* (Pennsylvania).

2284. **Epstein, L. J. Attitudinal changes attendant upon variations in experience.** *J. educ. Res.*, 1941, 34, 453-457.—Changes in social and political attitudes resulting from a four-day field trip to Muscle Shoals, CCC camps, Safety and Health Bureaus in Memphis, etc. were tested by a questionnaire with a weighted method of scoring to indicate the student's conservatism or liberalism. The subjects were 50 boys and girls from the two upper grades of the Demonstration School of Peabody College for Teachers. The group was tested three or four weeks before the trip and again im-



mediately afterwards. The results indicate that a change in attitudes was effected by the trip in the direction of making for greater liberalism toward governmental participation in the sorts of projects visited.—*S. W. Fernberger* (Pennsylvania).

2285. **Estabrooks, G. H.** *Man, the mechanical misfit.* New York: Macmillan, 1941. Pp. 251. \$2.50.—In her search for an efficient model, Nature has tried one design after another. Man is her greatest achievement; but driven by the pleasure principle, he is using his superior brain to thwart the law of natural selection, and so has doomed himself to ultimate destruction. Medical science is supplying the tools. Artificial immunization and other forms of medical magic are allowing the weakling and structurally defective specimen to perpetuate their kind. Birth control is increasing the ratio of feeble-minded to superior intellects. By destroying the fittest, war is hastening the debacle. As advancing civilization puts a higher premium on superior mentalities, demand will eventually exceed supply. Research will languish; the ranks of skilled technicians will be depleted. An intellectually enfeebled race will no longer be able to prevent Nature from exacting its final tragic toll of a people deprived of natural vigor. More research in the field of human heredity and sterilization of the mentally retarded are recommended by the author as solutions to the problem.—*M. R. Sheehan* (Hunter).

2286. **Eysenck, H. J.** 'Type'-factors in aesthetic judgments. *Brit. J. Psychol.*, 1941, 31, 262-270.—5 sets each of 30-50 pictures were presented to 15 subjects, to rank the pictures in each set in order of liking, using a scheme of grouping approximating to the normal distribution curve. Factors were extracted from the correlated rankings by a method suggested by Burt. The same 2 factors were active in each of the 5 sets of pictures. One of these was the *T* factor previously isolated, a bipolar factor dividing preference for the formal from that for the representational type of picture. The other factor, *K*, seemed to divide those who preferred the modern from those who preferred the older style of painting. It was identified provisionally with 'brightness' and correlated with extraversion, radicalism, youth, and, possibly, with preference of color to form. The latter also appeared to correlate with extraversion.—*M. D. Vernon* (Cambridge Univ.).

2287. **Ford, R. N.** *Scaling experience by a multiple-response technique: a study of white-Negro contacts.* *Amer. sociol. Rev.*, 1941, 6, 9-23.—A multiple-response questionnaire was prepared in which the subject was asked about the treatment of Negroes in his home community, and about his own responses in personal contacts he had had with Negroes. By a combination of the Thurstone and Likert procedures, responses on these items were scaled; from the questionnaire could than be derived two scores for degree of friendliness toward Negroes, first as indicated in the background of community contacts and second in the individual's report of his own reactions to Negroes. Reliability is satis-

factory, as is the validity determined by differentiation between Northerners and Southerners. Correlations with attitude scales are reported, but they are based on a group composed of Northern and Southern subgroups. An experiment with 23 students on the effect of a series of lectures and class discussions about race relations yielded the finding that attitude scores were significantly shifted in the direction of the lecturer's point of view, but that experience scores were changed only slightly.—*I. L. Child* (Harvard).

2288. **Ford, R. N.** *Scaling white-Negro experiences by the method of equal-appearing intervals.* *Sociometry*, 1940, 3, 343-352.—Thurstone's technique was employed to develop a scale of experiences, both personal and characteristic of the subject's community. Likert's multiple response technique was also used and "proved to be the better tool." A number of difficulties were encountered in the use of the method of equal-appearing intervals, particularly in connection with the appearance of bunching and gaps in the scale.—*L. J. Stone* (Vassar).

2289. **Fuller, R. C., & Meyers, R. R.** *Some aspects of a theory of social problems.* *Amer. sociol. Rev.*, 1941, 6, 24-32.—"Social problems" would become more of a significant category for study if the importance of subjective value judgments as a determinant of social problems were fully recognized.—*I. L. Child* (Harvard).

2290. **Gilliland, A. R., & Katzoff, E. T.** *A scale for the measurement of attitudes toward American participation in the present European conflict.* *J. Psychol.*, 1941, 11, 173-176.—With a view toward measuring "changes of an attitude in its natural environment," the authors have constructed a scale of 25 statements by the Thurstone technique. Preliminary data are given on the results of administration of the scale to 206 beginning psychology students and 62 summer school students.—*F. A. Mote, Jr.* (Connecticut).

2291. **Henle, M.** *The causes and the prevention of war: a reply to Professor Dunlap.* *Psychol. League J.*, 1941, 4, 38-41.—Dunlap (see XV: 1409) believes that force is inevitable in the dealings among nations, but that war could be prevented by an international police force. This is a treatment of a symptom (war) rather than of the causes of the symptom. A basis for the modification of the conditions giving rise to war may be found in the cause of aggressive behavior, which may be due to frustration of individual or group goals. Substitutions for aggression external to a group may also be utilized, such as in-group aggression or the abolition even of in-group aggression through enforcement of order by authority. Two other points made by Dunlap are treated briefly.—*C. N. Cofer* (George Washington).

2292. **Hiller, E. T.** *Houseboat and river-bottoms people.* Urbana: Univ. Illinois Press, 1939. Pp. 146. \$2.00.—[Abstracted review; original not seen.] In 1935 a sample of 683 households living along the

Ohio and Mississippi Rivers in Illinois were interviewed with a systematic schedule. Their attitudes and patterns of living are reported here and show many of the characteristics of a frontier culture.—*I. L. Child* (Harvard).

2293. Horowitz, E. L. Some aspects of the development of patriotism in children. *Sociometry*, 1940, 3, 329-341.—E. Lerner's concept of spontaneous sociocentrism is contrasted with the interpretation by Sherif and others of social attitudes as interiorizations of social norms. Data on the development of patriotism (esthetic appreciation of a national symbol, the flag) and on several other social values are offered as refutation of Lerner's theory. 82 children in the 10 grades of a rural school were asked to select the 5 best looking flags from a page of 24. A clear-cut rise in preference for the American flag is demonstrated and, in general, a shift from primitive to sophisticated patterns. Similar shifts occur with reference to place, city, street, house, room, dress. These results are interpreted as reflecting the beginnings and later stabilization of frames of reference, more and more integrated with the views of the adult community. Lerner's view of the hierarchical development of integration, in turn, into the family group, into other face-to-face groups, and finally into secondary groups is criticized in the light of these findings. "The crux of the difficulty is the postulation of a spontaneous sociocentrism which makes children universally receptive to race (and other group) prejudices."—*L. J. Stone* (Vassar).

2294. Huyck, E. M. The heredity factors in speech. *J. Speech Disorders*, 1940, 5, 295-304.—The author examines the literature dealing with hereditary factors in speech. A list of 39 titles is given. "Conclusions from such material . . . are not warranted. . . . The research is lacking in quantity and quality, . . . generalizations are speculative."—*C. V. Hudgins* (Clarke School).

2295. Infeld, H. The aged in the process of ethnic assimilation. *Sociometry*, 1940, 3, 353-365.—By the case study technique 13 German and 13 Polish immigrants were examined on problems related to assimilation, especially as they affect the aged. Major factors examined are segregation, low socioeconomic status, leaders and organizations preserving the group culture, transmission of cultural heritage to the next generation, acceptance of unavoidable American influences as a means of strengthening group coherence, opposition to intermarriage, and discrimination by native Americans. Distinct differences between the two groups were indicated, revealing greater assimilation of the German group. The evidence suggests "that the difference in the attitudes on the part of the native Americans toward the members of the two minority groups under consideration is one of the main causes of the difference in the progress these groups appear to have made in their assimilation." The Polish group shows "even the unexpected phenomenon of a third generation showing a stronger,

although modified, attachment to their own cultural heritage than the second generation." The aged played a strategic role in these developments.—*L. J. Stone* (Vassar).

2296. Johnson, C. S. Growing up in the black belt. Washington: American Council on Education, 1941. Pp. xvi + 360. \$2.25.—This is one of a series of studies of Negro youth conducted concurrently in different sections of the United States by the American Youth Commission. The subjects were Negro youth in eight counties selected as typical of the rural South. Questionnaires, interviews and family schedules were used. The results reported are based on data collected from 2000 young people, and 916 families of the subjects. The study was designed to elucidate the process of personality development of southern rural Negro youth, with emphasis upon the minority racial status of the subjects. Aspects of adjustment studied include social activity, status and security, relationship with the school and church, play, occupational outlook and incentives, attitudes toward sex and marriage, intrarace attitudes, relationship of color and status, relations with whites. The questionnaire results form the basis for group comparisons. Among the findings are the following: a positive relationship between high maladjustment scores and family instability; inadequacy of school, church, and recreational facilities for molding wholesome personalities; occupational choices made on an escape basis; a trend toward stricter sex standards and more stable family life; lack of emotional security from identification with the group; little correlation between class and color. Tests used were the Kuhlmann-Anderson Intelligence Test, the Personal Values Test, the Personal Attitudes Test, the Color Rating Test, and the Occupations Rating Test. There is a memorandum by Harry Stack Sullivan.—*E. L. Horowitz* (City College, New York).

2297. Jones, A. W. Life, liberty, and property. Philadelphia: Lippincott, 1941. Pp. 397. \$3.50.—Has the industrialization of our society led to a split into two or more groups with fundamentally different ideas? If economic class differentia are to be found anywhere, surely it should be in attitude toward corporate property. A novel type of questionnaire was prepared to measure this attitude. It consisted essentially of 8 little stories describing real or realistic incidents which involved conflict between corporate property rights and several varieties of personal rights; the subject was asked to express approval or disapproval of certain actions described in each story, and his attitude was rated on a 5-point scale. Ratings on the 8 items were added to give a total score, and detailed comments by the subject were also recorded. This questionnaire was administered to a random sample of 303 residents and to members of specific occupational and organizational groups in Akron (1705 subjects in all); for 66% of the cases, individual interviewing was used and for the rest a printed form of the questionnaire was administered in group gatherings. Significant findings are numerous; one of the most

striking is that there is virtually no overlap between the distributions of scores for top executives and for C.I.O. members. Quantitative and qualitative data are reported for many economic groups and according to political party, religion, age, doctrinaire influences, and other variables. The probable sources of group differences and of individual differences within the groups are amply treated; the individual's generalized attitude toward authority is especially stressed.—*I. L. Child* (Harvard).

2298. Kitay, P. M. A comparison of the sexes in their attitudes and beliefs about women: a study of prestige groups. *Sociometry*, 1940, 3, 399-407.—The attitude toward women of 34 junior college girls and 37 boys was measured by a 90-item scale. Although the male attitude toward women was considerably less favorable than the female, "approximately 66 per cent of boys and girls have similar composite attitudes toward women." Women favor themselves more than does the male group to the greatest extent in politics and certain miscellaneous items, while an actual reversal is found in connection with opinions on sexual freedom. Charts and graphs show the acceptance of both favorable and unfavorable statements about women by each group in each subject (politics, emotional make-up, mental ability, etc.). But despite the differences, and the fact that the subjects have grown up during a transition in attitudes toward women "the sexes show a striking agreement in this study. The conclusion arrived at is that a low prestige group does tend to adopt prevailing views originated by a high prestige group even when they are uncomplimentary to itself, but to a lesser extent than does an outside group." This conclusion is offered as a hypothesis for research with other low prestige groups.—*L. J. Stone* (Vassar).

2299. Landecker, W. S. The social aggregate. *J. soc. Phil.*, 1941, 6, 150-171.—Various definitions of the social aggregate are critically reviewed. It is concluded that "it is the process of becoming united which has to be considered the very nature of the social aggregate." The essence of the social aggregate is defined as a continuous process of integration. By this means it is conceived as a reality and as a unity. "Ontologically, social aggregate and integration are the same."—*W. A. Varvel* (Chicago).

2300. Mead, M. The mountain Arapesh. II. Supernaturalism. *Anthrop. Pap. Amer. Mus.*, 1940, 37, No. 3, 319-451.—This is the second report on the Arapesh of New Guinea, studied by Fortune and Mead in 1931-32, with special reference to their non-material culture. The present monograph includes not only a rich collection of concrete materials (at least 40 selected myths and materials on ritual belief and practice) but also general formulations with respect to Arapesh attitudes towards the natural world, human beings, and death. Arapesh attention is directed to two aspects of sexuality; the aggressive kind symbolized by bad blood, leading to failure of crops, failure in hunting, and death; the parental use, symbolized by good blood, unaggressive and cherishing, leading to birth, health, growth, and finding of game. The Arapesh hold a mild belief in beneficent

charms and formulas, of which they not only have very many, but for which they also have an equally large number of more agreeable alternative methods to influence the supernatural and produce the same results.—*G. C. Schwesinger* (American Museum of Natural History).

2301. Mead, M. Character formation in two South Sea societies. *Trans. Amer. neurol. Ass.*, 1940, 66, 99-103. Abstract and discussion.

2302. Miller, D. C. Personality factors in the morale of college-trained adults. *Sociometry*, 1940, 3, 367-382.—An extensive questionnaire including scales measuring job satisfaction, economic status, cultural status, political attitudes, general adjustment, and morale was returned by 59% of an original group of 1600 subjects representing a cross-section of Minnesota graduates. The sample was young, middle class, urban, and selected in intelligence and training. Very high and very low morale groups were selected and compared on 80 personality variables. The comparisons and critical ratios are presented in detail. Certain generalizations are offered in summary: High morale subjects are characterized by conventionality and conformity and the wish to continue a stable existence, while low morale subjects desire to imitate the higher economic classes. High morale persons can accept defeat as personal failure, while those of low morale seek rationalizations and, when most despondent, give up and feel they have lost prestige. A number of significant problems for further research are raised by the findings. (See also XV: 1878).—*L. J. Stone* (Vassar).

2303. Mitchell, C. Do scales for measuring attitudes have any significance? *J. educ. Res.*, 1941, 34, 444-452.—An attitude scale concerned with discovering the beliefs and attitudes which pupils hold toward education, school and school practices (a sample of which is included in the text) was prepared in two forms. In the first form, those items which tend to making school more serious, rigid, and difficult were given the odd number and those items which tend towards lightening the work of the pupils were given the even numbers. From the results of administering Scale A to more than 300 pupils, the second scale was prepared with the items in the reverse order and was administered to the same pupils three months later. From a consideration of the results, the author concludes that these scales give some index of the pupil's beliefs or attitudes and that they measure in some degree what they are intended to measure. The results indicate that the scales have considerable reliability on the basis of the correlation between the two forms.—*S. W. Fernberger* (Pennsylvania).

2304. Moreno, J. L. A frame of reference for testing the social investigator. *Sociometry*, 1940, 3, 317-327.—"In the social sciences, the subjects must be approached in the midst of an actual life-situation and not before or after it." Participant observers are therefore necessary. Training in psychodramatic scenes serves to objectify such observers. "The range of roles and the range of



expansiveness of each investigator become clearly defined and the stimulus which he may be to the subjects of his investigations has become a known reality." "The paradox is that the investigator, although he has become objectified by this process—a 'controlled participant observer,' so to speak—still continues to be what he originally started out to be: a subjective participant." The procedure is illustrated in a detailed presentation of a series of tests designed for the purpose.—*L. J. Stone (Vassar)*.

2305. Peters, C. C. The individual and his environment. *Rev. educ. Res.*, 1940, 10, 23-29.—The literature for the period from August, 1936 to August, 1939 is reviewed under the following headings: influence of favorable environment on the IQ; environment and social development; influence of environment upon success; surveys of youth out of school; factors in adjustment and delinquency; ideals, attitudes, and moral concepts; factors influencing attitudes; social distance; other studies of validity of self-testimony. There are 50 titles in the bibliography.—*M. Keller (Butler Hospital)*.

2306. Pierce, L. A. Rhythm in literature parallels the scale of specificity in speech development. (Microfilm.) Ann Arbor, Mich.: University Microfilms, 1940. Pp. 154. \$1.93.

2307. Przulski, J. La participation. (Participation.) Paris: Alcan, 1940. Pp. xii + 167. Frs. 18.—The author does not agree with the position taken by Levy-Bruhl in *The primitive mind* according to which a mystical, antilogical, and anti-scientific way of thinking, characterized by participation of the individual in the group and the divinity, is predominant among primitive societies. There are not 2 types of thought, civilized and primitive, but an indefinite number of mental levels, which are distributed along a continuous curve of mental development. Convinced of the unity of the human mind, the author shows that participation, in various forms, is common to all cultures. Part I presents an outline of the mental evolution of mankind since the earliest times. Chap. 1 discusses 3 stages of mental development: "vegetalism" and totemism; agrarian religions; and universal religions. Chap. 2 shows by an analysis of primitive institutions, myths, and languages how the human mind learns to differentiate things. Chap. 3 deals with the concept of solidarity; solidarity is found between man and his totem, disease and death, lightning and thunder, etc. Part II is concerned with participation proper and deals in 4 chapters with its modes and foundations, and its expressions in primitive, agrarian, and urban cultures.—*C. Nony (Sorbonne)*.

2308. Rashevsky, N. Contributions to the mathematical theory of human relations. IV. Outline of a mathematical theory of individual freedom. *Psychometrika*, 1940, 5, 299-303.—An attempt is made to define and treat analytically the concept of individual freedom in a society. Two possible definitions are briefly discussed. One takes as a measure of freedom the ratio  $(w_0 - w)w_0$ , where  $w_0$  is the maximum amount of work that a person can physi-

cally perform per unit time and  $w$  is the amount of work which he has actually to perform per unit time in a given society. The other definition takes as a measure of freedom that fraction of an individual's time during which he can indulge in any activity of his own choice without interfering with other individuals. Expressions are derived by way of illustration, giving the individual freedom in terms of other parameters which characterize the social structure.—(Courtesy *Psychometrika*).

2309. Rosenzweig, E. M. Some notes, historical and psychoanalytical, on the people of Israel and the land of Israel with special reference to Deuteronomy. *Amer. Imago*, 1940, 1, No. 4, 50-64.—The author seeks to explain the absence in post-Biblical Judaism of any vestige of the worship of a mother-goddess despite its origin in a culture area where the cult of the mother-goddess was universal. With the promulgation of Deuteronomy came a "sublimination of sexual interest in the mother-goddess and her sacred locale by diffusing it over the whole land of Israel."—*W. A. Varvel (Chicago)*.

2310. Sachs, H. Beauty, life and death. *Amer. Imago*, 1940, 1, No. 4, 81-133.—A psychoanalytical theory of the nature of beauty is presented in detail. The absence of anxiety is an indispensable condition for beauty. The main factors paving the way towards the feeling of beauty are said to be "the origin from the 'play'-attitude, the fullest psychic activity, unhampered by any concerns about reality and practical results, the fixation on the pre-pleasure level and the precise manifestation of an Id-content, being produced intra-psychically, but stimulated by sensual impressions." A conflict is found between perfect beauty and exuberant motility. In the beautiful a compromise is effected "between the two antagonistic powers, motion and immobility, life and death."—*W. A. Varvel (Chicago)*.

2311. Saetveit, J., Lewis, D., & Seashore, C. E. Revision of the Seashore measures of musical talent. *Univ. Ia. Stud., Aims Progr. Res.*, 1940, No. 65. Pp. 62.—The 1939 revision of the Seashore measures of musical talent is described. One of the original measures, the consonance test, was eliminated and a timbre test added; the other 5 original measures were retained in essence, although modifications were made. The revised edition consists of two series, one for dragnet purposes, and the other for use in more intensive testing of musical groups and selected individuals. Revisions were based on testing of Vth to VIIIth grade children and adults. Per cent correct responses and coefficients of reliability are given for each item. Problems relating to stability and validity are discussed. (See XIV: 2007.)—*B. Wellman (Iowa)*.

2312. Seashore, C. E. What can psychology do in music? *Music Educators J.*, 1941, 27, 25.—After having written a series of 28 articles on the relation of psychology to music the author attempts a forecast of future relations, based on what has already been achieved. A dozen features are listed.—*P. R. Farnsworth (Stanford)*.

2313. Thomsen, A. Psychological projection and the election: a simple class experiment. *J. Psychol.*, 1941, 11, 115-117.—The author describes a college class experiment designed to show that voters tend to predict that their candidate will win, thus projecting their desires and indulging in unscientific, wishful thinking.—*F. A. Mole, Jr.* (Connecticut).

2314. Valavalkar, P. H. Hindu social institutions with reference to their psychological implications. Bombay; New York: Longmans, Green & Co., Ltd., 1939. Pp. xxxvii + 338. Rs. 7/8.—[Abstracted review; original not seen.] Using the method of historical research as well as his knowledge of contemporary India, the author analyzes the psychological significance of the caste system and of traditional Hindu conceptions of education and life goals.—*I. L. Child* (Harvard).

[See also abstracts 2050, 2064, 2106, 2139, 2151, 2177, 2178, 2184, 2188, 2227, 2233, 2254, 2261, 2264, 2323, 2331, 2344, 2350, 2355.]

### CRIME AND DELINQUENCY

2315. Baker, H. M. Observations on prisoners. *J. crim. Psychopath.*, 1941, 2, 367-375.—The article presents data on 112 prisoners, referred to the Boston Psychopathic Hospital by a local court, who presented odd behavior or previous history of mental peculiarities when they came to court. It was found that, although the majority of the individuals were single, most of the alcoholics were married people whose symptoms revolved around an unhappy married life.—*A. Chapanis* (Yale).

2316. Barbeau, A., & Lecavalier, P. Profil criminologique de la démence précoce. (Criminological profile of dementia praecox). *Un. méd. Can.*, 1939, Sept., Oct., Nov., and Dec.—[Abstracted review; original not seen.] The authors review the history of the classification of dementia praecox and state their own conception and definition. Of 905 criminals examined by them, 184, or 20%, fit the criteria and were classified as dementia praecox. From an examination of the kinds of crimes committed by these criminals, the conclusion is reached that, despite the benign character of many of the offenses, the individual suffering from dementia praecox is very frequently a dangerous criminal.—*A. Chapanis* (Yale).

2317. Bromberg, W. The making of the adult criminal. *J. crim. Psychopath.*, 1941, 2, 321-328.—Studies of criminal case history material indicate that both the adolescent and adult criminal "appear to be responding to deep emotional drives as well as practical necessity in their criminal offenses. . . . Adolescence appears to be a good point to study the crystallization of emotional conflicts into antisocial conduct."—*A. Chapanis* (Yale).

2318. Carroll, D. Observations on the psychiatric handling of delinquents. *Med.-leg. Rev.*, 1940, 8, 182-198.—[Abstracted review; original not seen.] The author contends that there will never be enough psychiatric or other types of personnel highly

trained in the evaluation of personalities to handle the large numbers of offenders appearing before the courts. To alleviate this situation the author suggests: training lay personnel as assistants, establishing a system for sorting out those offenders in especial need of psychiatric attention, instructing magistrates in the fundamentals of personality deviation, and establishing special centers for the observation of criminals under treatment.—*A. Chapanis* (Yale).

2319. Cassity, J. H. Personality study of 200 murderers. *J. crim. Psychopath.*, 1941, 2, 296-304.—Since only 5% of this group of murderers were found to be psychotics or mental defectives, the author has concentrated on investigating the underlying psychopathological mechanisms in the 95% who were presumably normal. For purposes of discussion the murders were classified as follows: alcoholic murders, murders in the course of robbery, murders in the course of homosexual panic, love triangle murders, parent surrogate murders, and surface murders. In all but the last group (comprising 30% of the total) certain common psychological features were identified.—*A. Chapanis* (Yale).

2320. Fay, P. J., & Middleton, W. C. The ability to judge truth-telling, or lying, from the voice as transmitted over a public address system. *J. gen. Psychol.*, 1941, 24, 211-215.—An announcer asked each of 6 speakers 10 personal questions, which were answered in a complete sentence. 47 students judged the answers as truthful or false. The accuracy of the judgments was about 5% above chance. False answers were more accurately judged than true answers. Slight variations in accuracy were found for judgments of the different speakers. Variations in accuracy also appeared for judgments of speakers of different sex and by students of different sex.—*C. N. Cofer* (George Washington).

2321. Fedden, R. Suicide; a social and historical study. London: Peter Davis, 1938. Pp. 351. 12s. 6d.—[Abstracted review; original not seen.] The general approach to the problem is historical; much illustrative case material is presented. The social factors and group movements which have produced various forms and frequencies of suicide are discussed.—*F. W. Finger* (Brown).

2322. Henninger, J. M. Exhibitionism. *J. crim. Psychopath.*, 1941, 2, 357-366.—The author summarizes the results of a careful examination of 51 individuals arrested and held for court on charges of indecent exposure and open lewdness in Allegheny County, Pennsylvania. With one exception all the individuals were male. The average age of the offenders was 30 years with only two below 21. 35% of the cases were diagnosed as definitely psychotic or mentally deficient, and only 1 exhibited no major psychopathy. The outstanding statistical fact is the almost invariable failure of the individuals to achieve a normal heterosexual relationship.—*A. Chapanis* (Yale).

2323. Karpman, B. Criteria for knowing right from wrong. *J. crim. Psychopath.*, 1941, 2, 376-386.

—The gist of the article contains an argument against the traditional legal attitude (1) of a clear-cut separation between sanity and insanity and (2) of precise knowledge on the part of the criminal of the difference between right and wrong. "Instead there must be assumed a flexible functional attitude that recognizes degrees of right and wrong, and types of personalities that react differentially to problems of right and wrong."—*A. Chapanis* (Yale).

2324. **Martin, P.** *Les mineures vagabondes et prostituées.* (Adolescent vagrant girls and prostitutes.) Lyon: (Dissertation), 1939. Pp. 216.

2325. **Pessin, J.** *Self-destruction tendencies in adolescence.* *Bull. Menninger Clin.*, 1941, 5, 13-19. —The case history of an adolescent girl was featured by many and varied forms of self-mutilation. It is made use of in demonstrating some of the psychological motives of self-destruction.—*W. A. Varvel* (Chicago).

2326. **Wells, W. R.** *Experiments in the hypnotic production of crime.* *J. Psychol.*, 1941, 11, 63-102. —The author reports success in inducing a non-criminal hypnotized subject to steal money post-hypnotically. The literature of hypnotic criminality is discussed, the failures noted, and reasons for the failures given.—*F. A. Mote, Jr.* (Connecticut).

[See also abstract 2404.]

#### INDUSTRIAL AND PERSONNEL PROBLEMS

2327. **Barnes, R. M.** *Motion and time study.* (2nd ed.) New York: Wiley, 1940. Pp. 401. \$3.75.

2328. **Caceres, A. M.** *La higiena mental y el trabajo.* (Mental hygiene and work.) *Rev. Psiquiat. Uruguay*, 1940, No. 26.—[Abstracted review; original not seen.] The need of mental hygiene in relation to such problems as working hours and distribution of work is pointed out.—*J. E. Bader* (Brandon State School).

2329. **Caceres, A. M.** *La psicotecnica en la racionalización del trabajo.* (Psychotechnics in the rationalization of work.) *Rev. Psiquiat. Uruguay*, 1940, No. 26.—[Abstracted review; original not seen.] Psychotechnics is discussed according to Tolouse, Arend, and Robert; a general program of psychotechnics is presented; and psychological tests are analyzed for items that can be used in psychotechnical examinations.—*J. E. Bader* (Brandon State School).

2330. **Drake, C. A.** *New developments in the selection of factory workers.* *Prod. Ser. Amer. Mgmt. Ass.*, 1940, No. 127, 32-43.—Striking relationships shown between certain elements or therbligs in test cycles and job cycles have given rise to the technique of constructing tests from time and motion study of the job. 6 classes of measurable human abilities are alleged to have been isolated from 22 tests thus far designed. Distributions for several abilities are given. It is suggested that the efficiency percentage (test score divided by the

group average) may serve as a criterion by which to measure managerial or supervisory effectiveness.—*A. M. Kershner* (Maryland).

2331. **Jahoda, M.** *Some socio-psychological problems of factory life.* *Brit. J. Psychol.*, 1941, 31, 191-206.—3 psychological problems of factory life which must necessarily exist in every factory in some form are discussed. (1) The social relationship between workers in the horizontal dimension is equalitarian; the vertical relationship between workers and foremen is dictatorial; the vertical relationship between workers and management is patriarchal and ambivalent. (2) The predominant experience of the factory girl on repetitive work is boredom, a phenomenon entirely different from fatigue. The time experience is chiefly dependent on the length of the uninterrupted working spell. (3) The standards of value of school life are entirely different from those in the factory, where the pressure of social norms is strong and compels the girls to imitate one another. This imitation results in producing a type and hinders the development of individuality. The lack of an equally strong set of norms for the older woman in the factory makes her adjustment subjectively difficult, and prevents her from leading a normal life inside the factory atmosphere.—*M. D. Vernon* (Cambridge Univ.).

2332. **Janet, M.** *Les aptitudes intellectuelles des ouvriers.* (The intellectual aptitudes of workmen.) In Various, *Mélanges Pierre Janet*. Paris: Editions d'Artrey, 1939. Pp. 131-145.—The author, an engineer of public works and buildings, reports his conclusions on the intellectual capacity of workmen, mainly unskilled laborers. He finds that the intellectual inferiority of such men is not the consequence but the cause of their social status. The majority of them experience great difficulty in meeting a task requiring any extra intellectual effort and find habitual and monotonous work soothing instead of fatiguing. Their main dread is being required to plan, organize their work in advance, or to take the initiative. A second category of workmen includes those who, though more intelligent than the above, are undisciplined, often drunken, emotionally unstable, capable of a transitory effort, but not of any sustained effort. Skilled workmen, such as machinists, carpenters, locksmiths, etc., have a high grade of intelligence, reasoning power, and spatial imagination in addition to a high degree of manual dexterity. Suggestions are given on methods of recruiting and training men in the specialized trades.—*C. Nony* (Sorbonne).

2333. **Kindall, A. F.** *Job description and rating.* *Personnel*, 1938, 14, 122-130.—For each job at \$4,000 per annum or less, General Foods utilizes a procedure of job description, rating, and evaluation of ratings. Forms used in the job description and rating are presented and the evaluation by means of contacts with outside organizations is described. The company has had one year's experience with this plan from which the author draws conclusions.—*A. M. Kershner* (Maryland).



2334. Lauer, A. R., & Allgaier, E. A preliminary analysis of the psycho-physiological correlates of automotive manipulation. *Amer. J. Optom. Arch. Amer. Acad. Optom.*, 1941, 18, 49-57.—Results of a series of tests on professional and non-professional drivers failed to show significant differences between the groups, or significant correlations with accident records. Complete test results are more informative than the composite scores, and may be useful as guides in remedial programs.—*M. R. Stoll* (American Optical Company).

2335. Lowry, S. M. Which men will make the best foremen? *Prod. Ser. Amer. Mgmt. Ass.*, 1940, No. 127, 3-12.—Leadership, management's point of view, level of technical information, promise in improving operating methods and reducing costs, ability in understanding and interpreting company's industrial relations policies, open-mindedness, and growth possibilities are questions to be considered in promotions to the rank of foreman. Some of the results from Proctor & Gamble's study of 163 foremen, which involved ratings, psychological testing, and physical examinations, are discussed.—*A. M. Kershner* (Maryland).

2336. Parney, F. S. Neuroses in a large office group. *Canad. publ. Hlth J.*, 1939, 30, 534 ff.

2337. Prudden, G. H. The right man for the right job. *Prod. Ser. Amer. Mgmt. Ass.*, 1940, No. 127, 25-31.—The 4 major points for which an aviation plant looks in an applicant are, in order of their importance: a well-balanced temperament, aptitude for a particular job, special knowledge or skill, and intelligence.—*A. M. Kershner* (Maryland).

2338. [Various.] Dictionary of occupational titles, I. Washington, D. C.: Division of Standards & Research, U. S. Government Printing Office, 1939. Pp. 1287. \$2.00.—[Abstracted review; original not seen.] This source book for all people concerned with occupations, employment, counseling, or management was prepared by the Department of Labor. The work was done by personnel authorities who not only studied the jobs, but also the skills, abilities, and personal characteristics of workers.—*M. B. Mitchell* (Independence State Hospital, Iowa).

2339. [Various.] Selection of personnel in the field of social work. *Ment. Hyg., N. Y.*, 1941, 25, 152-163.—Maud Watson advocates thorough physical examinations, intelligence tests, and psychiatric interview of candidates for students of social work, or applicants for clinic positions. Temple Burling makes two suggestions: "take people who have a real consuming curiosity about other people . . ." and "try to select people who are going to discover their own inadequacies and discomforts early in the game." He also points out that the psychiatrist assisting in selecting people must know intimately the job for which he is helping to select, as classical scientific diagnosis is not relevant. Helen Witmer believes that intake should be in charge of psychiatric case-workers who are also teachers of case-work. Eleanor Craneheld indicates

that the desire to help others, through selection of the profession of social work, is rooted more often than not in the student's own first-hand experience with trouble. The ability to help others may be different from the desire to help.—*W. L. Wilkins* (Milwaukee, Wis.).

## EDUCATIONAL PSYCHOLOGY

(incl. Vocational guidance)

2340. Abernathy, E. R. Some social aspects of the deaf. *Amer. Ann. Deaf*, 1940, 85, 433-445.—The author discusses various factors influencing the social development of deaf children. The effects of deafness upon speech and language development is probably the most important of these factors. Two educational methods have been developed to counteract these effects. (1) The oral method, speech and speech-reading (lip-reading), seeks to make the deaf child a participating member of the hearing world. The advantages and disadvantages of this method are discussed. Its socializing influence is found to be limited, since "most people would find only a small percentage of deaf children with understandable speech and good speech reading." (2) The manual method of education admittedly limits the area of social participation, but permits normal intercourse within a small group. "While the sign language can be used to convey ideas, it does little for the individual in terms of a reading or writing vocabulary."—*C. V. Hudgins* (Clarke School).

2341. Apperson, S. V. The effectiveness of orthoptic training as a means of remedial instruction of reading. *J. exp. Educ.*, 1940, 9, 160-166.—Orthoptic training, without formal educative training, resulted in gains in speed and comprehension in reading. Gains made by volunteer groups were greater and more significant than those made by students required to take the training. Intelligence appeared to be a factor in improved reading ability. Students of high scholastic aptitude, as a rule, improved most. Data are also presented on a follow-up study carried out a year after the termination of the original investigation.—*H. W. Karn* (Pittsburgh).

2342. Averill, L. A. Case studies in the school. *Ment. Hyg., N. Y.*, 1941, 25, 43-57.—Administrative devices to promote more emphasis on the emotional side of children's development in schools will fail unless teachers regard each child as an individual. This regard is best brought about by the school's use of the case study technique. The homeroom teacher might well be expected to collect case study data on difficult pupils and to lead case conferences. Assistance on more difficult cases should be sought through all available clinical resources outside of the school. Superintendents should work out a reading and discussion course on the principles of mental hygiene applied to the classroom.—*W. L. Wilkins* (Milwaukee, Wis.).

2343. Barr, A. S. On the use of anecdotal records. *J. educ. Res.*, 1941, 34, 358-359.—Cautions are given for the use of the anecdotal method because of the

problem of sampling, of the interpretation of the data, and of generalizing from individual observations.—*S. W. Fernberger* (Pennsylvania).

2344. Bingham, H. J. The relation of certain social attitudes to school achievement. *J. exp. Educ.*, 1941, 9, 187-191.—Social attitudes were measured by an attitude scale constructed by the author; subjects were senior high school students. Data show that students with better grades were in favor of: the government's spending program, the government's housing program, and industry rather than labor; they were opposed to an aggressive foreign policy. All correlations are sufficiently low to indicate that "influences other than those measured by quantitative estimates of achievement are the most related to social attitudes."—*H. W. Karn* (Pittsburgh).

2345. Blair, G. M. An experiment in vocabulary building. *J. higher Educ.*, 1941, 12, 99-101.—An experimental group of 101 college Juniors and Seniors were compared with a control group of 136 students, all in educational psychology classes. The vocabulary section of the Nelson-Denny Form A and Form B Reading Test was used at the beginning of the study and at the end. Considerable motivation was given to the experimental group, and they agreed to make notes recording new words. An average number of 119.3 new words were recorded with an individual range 25 to 392. The gain of the experimental group was average 3.6, the whole control group at 1.0. The control group was then broken up into a matched control group, and the results were 0.8. One of the outstanding benefits was the development of interest on the part of individual students.—*R. A. Brotemarkle* (Pennsylvania).

2346. Bromley, D. D. Education for college or for life. *Harper's Mag.*, 1941, 182, 407-416.—The Committee on the Relation of School and College of the Progressive Education Association in 1932 undertook an 8 year study to determine "whether the graduates of good progressive schools that had ignored specific college-entrance requirements could do as well in college as boys and girls from traditional schools." 250 colleges waived their technical admission requirements for graduates of 30 progressive schools. Progressive students were matched with ones from traditional secondary schools in intelligence, race, age, sex, community size, and economic background. A total of 3,000 students were in the two groups. In every subject but foreign languages the progressive group was slightly ahead in college grades. 75% more progressive than traditional students were noted by their college teachers as being "unusually competent in carrying out independent work." In their senior year in college 59% of the progressive students said they had made a "firm but flexible choice" of their vocation, as against 51% of the traditional group. Some of the progressive group complained they had not been taught how to take examinations, and many were "not so good in English as they should be." The complete report of this 8 year study will

appear in 5 volumes in 1941.—*A. Thomsen* (Syracuse).

2347. Brookover, W. B. Person-person interaction between teachers and pupils and teaching effectiveness. *J. educ. Res.*, 1941, 34, 272-288.—In order to determine the influence of the person-person interaction between high school teachers and pupils upon the teaching efficiency of these teachers, 2 questionnaires were employed to rate 39 teachers by 1139 pupils in 5 Indiana High Schools. The first was a Person-Person Interaction Scale, developed by the author, containing 9 'sort of relation' items with a choice of 5 answers for each. The second was the Purdue Rating Scale for Instructors which contains 12 items with 3 contrasting statements for each. Complete examples of both scales are given. A correlation of  $.639 \pm .16$  was found between the results of the two ratings, which would indicate that teachers who have a high degree of person-person interaction with their pupils also tend to be rated high as instructors by these same pupils. There is almost no correlation between student ratings and administrative ratings; the correlation between the ratings of 2 administrators is low but positive. Neither age nor sex of either rating pupil or of the teacher rated have any effect on the ratings by either scale.—*S. W. Fernberger* (Pennsylvania).

2348. Compton, R. K. Informing college freshmen of their scholastic-aptitude-test scores. *Sch. & Soc.*, 1941, 53, 62-64.—This article summarizes the replies of 331 institutions to a questionnaire in regard to telling freshmen their scores on the A. C. of E. Psychological Examination. 38 institutions notify all freshmen of their exact or approximate score. 81 give no information. The rest give information to varying proportions of students along with interpretation and attempted guidance. Opinion as to the desirability of giving out test results of this sort to students varies widely as it did in the 1930 survey. About one half believe it should be given only when essential for effective guidance. A little less than one third think it should be given to all freshmen and one seventh to none. A few advocate telling only the high and low ranking students.—*M. Lee* (Chicago).

2349. Connette, E. The relationship of age, experience, formal preparation, and marriage of college and university professors while becoming established in the profession. *J. educ. Res.*, 1941, 34, 327-334.—The study consists of a statistical analysis of the biographical sketches of 500 college and university professors selected from *Who's Who* (1937-1938) by controlled sampling of the entire volume. The results indicate that successful professors have delayed marriage until after their formal preparation was completed; that they did not obtain their professorships until after advanced degrees were secured; and that they did not serve an apprenticeship in the public schools or other educational institutions of grade-level lower than that of the college or university.—*S. W. Fernberger* (Pennsylvania).

2350. Davis, E. B., & Laslett, H. R. A study of the educational status and some educational implications of a local relief population. *J. educ. Res.*, 1941, 34, 255-258.—The authors studied 256 relief families registered in an Oregon county. Tables are given for the CA of husbands and wives, their school attainment, the size of the families, and the sizes of the probably completed families. On the whole, relief families are smaller than feeble-minded families. The average child of this population is retarded 0.94 years in school for his age group.—S. W. Fernberger (Pennsylvania).

2351. Dietrich, J. E. The effects of participation in extracurricular dramatics upon scholastic achievement. *Stud. higher Educ., Purdue Univ.*, 1940, No. 39, 16-30.—Data from students at Purdue and Wisconsin Universities who were actively engaged in dramatic work were compared with that from control students. The dramatic students showed a statistically reliable superiority in academic grades, but there was no correlation between amount of time spent in dramatics and academic grades.—C. M. Louttit (Indiana).

2352. Drake, C. A. The iota function. *J. educ. Res.*, 1940, 34, 190-198.—Suggestion of the extrapolation of the form of the achievement growth curve for the individual student, applied to the examination papers of 50 students in a course in biology, indicates the potentiality for growth.—S. W. Fernberger (Pennsylvania).

2353. Dwyer, P. S., Horner, C., & Yoakum, C. S. A statistical summary of the records of students entering the University of Michigan as freshmen in the decade 1927-1936. *Univ. Mich. adm. Stud.*, 1940, 1, No. 4. Pp. 226.—A statistical study of college entrants during a recent decade, involving 45 pre-college variables, 29 entrance variables, and 65 college variables. Coefficients of correlation, means, and standard deviations were computed and are presented in detail. The data indicate that: (1) correlation coefficients involving successive college semesters are about .7; (2) age at entrance and number of units of high school subjects presented yield small correlation with academic records; (3) there is appreciable correlation between college work and grades in high school subjects and freshman week test scores, respectively; (4) the various college records show appreciable correlation. Directions for the use of the tables and explanations of the statistical formulas used are included, as are a bibliography and descriptive material.—H. Beaumont (Kentucky).

2354. Dysinger, D. W., & Gregory, W. S. A preliminary study of some factors related to student achievement and grades in the beginning course in psychology. *J. gen. Psychol.*, 1941, 24, 195-209.—An objective test which contained 88 questions dealing with technical psychological matters, popular misconceptions, and popular conceptions involving a technical principle was constructed and was administered twice to 120 students in elementary psychology, on the first and last days of the semester.

Scores on the second testing were correlated with semester grades, and the  $r$  was 0.54. Mean scores on the two testings were much different, all types of questions showing an increase in the number of correct answers on the second trial. The largest improvement was on the technical questions. Improvement was related to final grade but not to Army Alpha score; final grades were much influenced by the amount of initial information and by intelligence. The test questions are presented.—C. N. Cofer (George Washington).

2355. Eschen, C. R. v. An evaluation of a secondary school course in "contemporary problems" from certain stated points of view. *J. educ. Res.*, 1941, 34, 265-271.—A contemporary problems course was introduced into the curriculum of the Ruthven High School, Ruthven, Iowa; the class met daily for 45 minutes from October until May. Instead of a merely informative discussion, the students worked in groups on one of the following problems: labor problems in the United States; the Supreme Court issue; or the Chinese-Japanese War. Before and at the end of the period, 8 Thurstone scales dealing with the attitude toward treatment of criminals, censorship, the Chinese, communism, the Constitution, the Germans, patriotism, and war were administered to all students along with other tests of mental ability and accomplishment. Only in the attitudes toward the Constitution, the Germans, and patriotism did the changes approach statistical significance.—S. W. Fernberger (Pennsylvania).

2356. Fahey, G. L., & Waller, C. H. An experimental investigation of the effectiveness of certain diagnostic and guidance procedures when applied in cases of low school achievement. *J. educ. Res.*, 1941, 34, 335-345.—A selected group of 32 Wisconsin pupils was divided into a control and an experimental sub-group, matched for intelligence, age, sex, grade, and curriculum. The experimental group was given a variety of tests in an effort to diagnose the causes for low standing and, on the basis of these results, was subjected to remedial procedures through individual conferences with trained case workers. The diagnostic and guidance services were effective in 12 of the 16 cases. The differences between the control and the experimental groups at the end of the experiment showed a critical ratio of 1.95 in favor of the experimental group.—S. W. Fernberger (Pennsylvania).

2357. Fletcher, D. E. The influence of color and form vision on the progress of medical students in microscopic anatomy; implications in medical education. *J. Ass. Amer. med. Coll.*, 1940, 15, 301-316.—[Abstracted review; original not seen.] Color and form perception is an important factor in the progress of students in microscopic anatomy, but bears little positive relationship to the grades made in the work.—D. J. Shaad (Detroit, Mich.).

2358. Gabel, O. J. The effect of definite versus indefinite quantitative terms upon the comprehension and retention of social studies material. *J.*



*exp. Educ.*, 1941, 9, 177-186.—Materials used in this study were typical of those with which pupils come into daily contact in their school work. Selections contained 40 quantitative terms dealing with time, area, distance, and size. Two identical forms of each selection were prepared, except that in one form the quantitative terms were stated definitely, in the other form indefinitely. The definite method of presentation leads to better comprehension and retention regardless of the type of quantitative concept or grade level.—*H. W. Karn* (Pittsburgh).

2359. *Gilkinson, H., & Knowler, F. H.* Analysis of a guidance questionnaire for students of speech. *J. exp. Educ.*, 1940, 9, 175-176.—An objective type guidance questionnaire for students of speech was constructed and validated. Significant items in various areas of the study of personality were analyzed and shown to be related to the quality of speech performance.—*H. W. Karn* (Pittsburgh).

2360. *Good, C. V.* Doctors' theses under way in education, 1940-1941. *J. educ. Res.*, 1941, 34, 367-400.—This classified list of 626 doctors' theses in progress gives name of the author, title of investigation, institution, and name of sponsor. (See also XV: 2361.)—*S. W. Fernberger* (Pennsylvania).

2361. *Good, C. V.* Doctors' theses under way in education. *J. educ. Res.*, 1941, 34, 474-480.—Supplementary to the listing already made in January (see XV: 2360), the author now gives 6 items from Rutgers University and 84 additional items for candidates for the degree of Ed.D. at Columbia University. In each case are given the name of the person making the study, the title of the study, and the faculty member primarily responsible.—*S. W. Fernberger* (Pennsylvania).

2362. *Gossard, A. P.* Superior and backward children in public schools. Chicago: Univ. Chicago Press, 1940. Pp. v + 172. \$2.00.—This study undertakes to trace the development and relationships of the many provisions for superior and backward pupils discussed in the annual school reports of ten large cities since 1870.—(Courtesy *Publishers' Weekly*).

2363. *Gray, W. S.* Summary of reading investigations: July 1, 1939 to June 30, 1940. *J. educ. Res.*, 1941, 34, 401-443.—This is an annotated bibliography of the material on reading published within the calendar year, treated under several areas of interest. Bibliography of 119 titles.—*S. W. Fernberger* (Pennsylvania).

2364. *Gray, W. S.* Reading. *Rev. educ. Res.*, 1940, 10, 79-106.—This article reviews the literature for the 3 years ending October, 1939 under the following topical headings: changing conceptions of reading, sociology of reading, physiology and psychology of reading, reading readiness, validity of reading-readiness tests, methods of teaching beginning reading, procedures in teaching reading throughout the grades, value of training in phonics and syllabication, content and grade placement of readers, reading vocabularies, studies of concepts and meaning

vocabularies, reading in the content fields, reading achievement and related factors, reading interests, diagnosis and remedial teaching, causes of severe forms of reading disability, visual defects and reading disability, tests and measurement, and hygiene of reading. The bibliography lists 156 titles.—*M. Keller* (Butler Hospital).

2365. *Grossnickle, F. E.* Comparison of achievement of pupils who are good and poor in learning division with a two-figure divisor. *J. educ. Res.*, 1941, 34, 346-351.—47 pupils who over a period of 76 school days made from 0-5 different kinds of errors were chosen as the good group, and another 47 pupils who made from 12-18 kinds of errors over the same period of time were selected as the poor group. These groups were tested for intelligence, achievement in arithmetic over a five-year period, and in general academic achievement over the same period. No difference in intelligence was found. Achievement in arithmetic in general was considerably higher for the good group in grades IV and V but about the same in the next 3 grades. There was no difference in general academic achievement between the two groups.—*S. W. Fernberger* (Pennsylvania).

2366. *Jersild, A. T.* Characteristics of teachers who are "liked best" and "disliked most." *J. exp. Educ.*, 1940, 9, 139-151.—Adults in appraising their childhood teachers tend largely to judge these teachers in terms of qualities which usually are deemed to be desirable in human beings in any walk of life as distinguished from qualities relating peculiarly to the work of a teacher. On the other hand, children, who still have the experience of living with their teachers from day to day, phrase their characterizations of teachers more in terms of specific features of the teacher's performance as the head of a class and as a pedagogue.—*H. W. Karn* (Pittsburgh).

2367. *Jones, U. C.* A critical survey of vocational guidance in schools for the deaf. *Amer. Ann. Deaf*, 1940, 85, 471-486.—An analysis of vocational guidance data obtained through questionnaires from 50 schools for the deaf is presented. The questions were concerned with methods and policies followed in these schools relative to a trained guidance personnel, the age of pupils at the beginning of vocational work, follow-up records, and use of vocational aptitude tests. Suggestions are made for the development of more adequate guidance programs in schools for the deaf.—*C. V. Hudgins* (Clarke School).

2368. *Kawin, E., & others.* Adjustment in the school and college situation. *Rev. educ. Res.*, 1940, 10, 421-428.—The literature is reviewed under the topical headings of: providing school environments conducive to mental health by evaluating general school programs and specific parts of school programs; the study of individuals in school situations, their emotional and social development, factors contributing to maladjustment and failure, adjustment problems in college; providing well-adjusted teachers through teachers' knowledge of mental

hygiene. There are 95 titles in the bibliography.—*M. Keller* (Butler Hospital).

2369. **Koeninger, R. C.** Objectives and achievements in introductory sociology. *J. higher Educ.*, 1941, 12, 35-40.—454 students in a sociology course were subjected to pre-tests and end-tests concerning the content of the course, attitudes before and after, and ability to analyze and understand data. The study shows clearly that students knew an average of 48% of the material before they took the course. At the end of the course the average increase was 15% but with a rather low ceiling. "The course appears to have been conducted on too low a plane and did not challenge students to acquire additional information." The differences between the sections of the class indicate that greater achievement is possible. The evidence indicates the course definitely affected attitudes by reducing uncertainties and by increasing both agreements and disagreements with the Department's point of view. The interpretation of social data showed the least change. A statistically significant change for the entire group and for individuals was revealed throughout the study.—*R. A. Brotemarkle* (Pennsylvania).

2370. **Lamson, E. E.** Do children who participate in a rich vital school curriculum achieve greater control over school subjects than do children who pursue a formal curriculum? *J. educ. Res.*, 1940, 34, 173-181.—The present study reports the results from 111 children in the fourth grade during four successive years. Achievement was measured by four forms of the New Stanford Achievement test and the Modern School Achievement Test. A statistical treatment of the results leads the author to the conclusion that a demonstrated superior achievement score may be accounted for in terms of curriculum for those students who participated in a special curriculum as compared with those who followed the formal curriculum.—*S. W. Fernberger* (Pennsylvania).

2371. **Lawton, G.** Does psychology deserve its popularity? *J. Adult Educ.*, 1940, 12, 138-141.—The author, a consulting psychologist, concludes that talks on psychology have only negligible value in changing lives in any fundamental respect. A course or book in psychology can offer little to large numbers of adult men and women because "the desire to remain as they are is greater than the desire to be different." The least effective forms of psychology are the most popular because, while they do not work, they give people a chance to put up a show of seeking a better adjustment. Real psychological aid to a person in conflict requires continuous individual treatment by an accredited practitioner.—*S. S. Sargent* (Barnard).

2372. **Lohmeyer, D., & Ojemann, R. H.** The effectiveness of selected methods of radio education at the school level. *J. exp. Educ.*, 1940, 9, 115-120.—For presentation of simple ideas to Vith grade pupils, straight talk and drama methods were more effective than a discussion method using several voices, this being especially true for the infrequent

radio listeners. For the teaching of attitudes, taking the group as a whole, no one method was consistently more effective than any other. In interest value the drama method was generally rated first, discussion last.—*H. W. Karn* (Pittsburgh).

2373. **McKee, B., Remmers, H. H., & Stratton, D. C.** Women's extracurricular activities as related to certain characteristics. *Stud. higher Educ.*, *Purdue Univ.*, 1940, No. 39, 5-15.—The relations between the extracurricular activities of 100 women students as rated on a specially devised scale and their intelligence, academic achievement, and personality ratings were studied. All correlations were low (.27 to .57) but positive. The raw data are given in full.—*C. M. Louttit* (Indiana).

2374. **Moore, C. C.** The rights-minus-wrongs method of correcting chance factors in the true-false examination. *J. genet. Psychol.*, 1940, 57, 317-326.—True-false tests of varying length (10, 25, 40, 70, 100 items), using meaningless Latin material, were administered to persons who knew no Latin. Thus the subjects, working in groups of 25, 60, or 100, were forced to guess. Analysis of the distributions of scores for each test-length and each group-size showed that (1) the more often a subject must guess the more likely he is to make a high or low score by chance; (2) the "rights-minus-wrongs" scoring does not reduce the influence of chance unless the ratio of guessed to known items is very small. The significance of these results is discussed.—*D. K. Spell* (Mississippi).

2375. **Norris, K. E.** The three R's and the adult worker. *McGill soc. Res. Ser.*, 1940, No. 10. Pp. xxiv + 213.—This is an inquiry into the educational status of employed and unemployed men, 15-60 years old, in an attempt to evaluate the permanence of school learning and its relationship to other elements in the employment problem. The author does not consider learning synonymous with education, but through necessity the study is confined to the tangibles of general reading ability, English vocabulary, spelling, language usage, arithmetic reasoning and computation, algebra, geometry, general science, literary knowledge, and geographical knowledge. This approach is justified, because "these subject-matter facts and skills have ordinarily been considered to have a pronounced vocational importance." The results of the study are presented in detail, and there is an appendix of statistical tables. The author concludes that there is no such thing as permanence of school learning, but only loss, gain, and modification in adult life, and that change is governed by the functional place of the learned material in the adult life of the individual. He believes that the same principle applies to the so-called cultural subjects. The implications the results have for educational theory and practice are discussed at length.—*G. S. Speer* (Central YMCA College).

2376. **O'Neill, H. P.** Toward mental efficiency. *Sch. & Soc.*, 1941, 53, 51-54.—A popular course offered at the Univ. of Detroit to small groups gives

experience with various test materials involving logical relationships and direction-following. After doing the tasks set, the pupils explain, discuss and criticize their answers, giving the instructor an opportunity to correct errors in their thinking. The pupils report that this has helped them in taking examinations and participating in class discussions. The only objective evidence of the good effect of the drill is that subsequent to it good marks were obtained by those pupils selected by teachers for the class because of their extreme weakness. Instruction, especially of groups of better students, has progressed well in the hands of advanced students or apprentice teachers, and for them it has proved a good training ground.—*M. Lee* (Chicago, Ill.).

2377. **Peake, N. L.** Relation between spelling ability and reading ability. *J. exp. Educ.*, 1940, 9, 192-193.—The coefficients of correlation obtained in the 5 grades tested (IV-VIII) range from .933 down to .426.—*H. W. Karn* (Pittsburgh).

2378. **Preston, M. I.** Development of language symbols and their irregularities and difficulties. *Trans. Amer. neurol. Ass.*, 1940, 66, 113-115.—Abstract and discussion.

2379. **Roslow, S.** Reading readiness and reading achievement in first grade. *J. exp. Educ.*, 1941, 9, 154-159.—Measures of intelligence and reading readiness were used in the placement of children into one of three first grade sections. Whenever necessary, pupils received preventive and remedial reading instruction during the first year. Test results at the end of the first year showed a strong tendency for the sections to differ in reading achievement, in agreement with the original measures. Furthermore, "... reading achievement of the children as a whole was above the norm for the end of the first grade and is taken as evidence of the success of the entire program. ... Although it is advisable to place children in first grade who are mentally older (M.A. above 6), who possess higher I.Q.'s (I.Q. above 100), and greater readiness for reading instruction (reading aptitude percentile above 50), the results support the belief that under a program as described ... mentally younger children (M.A. below 6), children with lower I.Q.'s (I.Q. below 100), and children somewhat immature for reading (reading aptitude percentile below 50), can successfully be taught to read in the first grade."—*H. W. Karn* (Pittsburgh).

2380. **Russell, D. H.** Reading preferences of younger adolescents in Saskatchewan. *Engl. J.*, 1941, 30, 131-136.—This study of sex differences in reading interests of 300 boys and girls of the IXth and Xth grades is compared with studies of similar groups in the United States.—*G. S. Speer* (Central YMCA College).

2381. **Russell, J. D.** [Ed.] Student personnel services in colleges and universities. *Proc. Inst. adm. Off. higher Instns*, 1940, 12. Pp. 300.—A collection of 22 papers presented and discussed at the twelfth annual Institute for Administrative Officers of Higher Institutions at the University of Chicago.

Six aspects of the general subject are included: (1) the obligations of the institution to its students; (2) administrative organization for student personnel services; (3) insitutional provisions for understanding students; (4) interpretation and use of data in counselling students; (5) the extra-classroom life of the student; and (6) evaluation of student personnel procedures.—*H. Beaumont* (Kentucky).

2382. **Ryans, D. G.** The first step in guidance: self-appraisal. *Coop. Test Serv. Publ. Meas. Guid.*, 1941, 1, No. 1. Pp. 35.—A report of the ninth annual National College Sophomore Testing Program, in which 153 colleges and 30,134 students participated in 1940. Normative data are presented for the minimum recommended program. Comparisons are made between test scores and self-ratings on a five-point scale involving (1) correct English usage, (2) effectiveness of English expression, (3) speed of reading comprehension, (4) understanding of difficult reading materials, (5) extent of vocabulary, (6) general cultural knowledge, and (7) knowledge of current happenings. On the basis of group averages, self-appraisals were reasonably accurate, but individual errors of judgment were extensive in many cases. Intercorrelations among test items show that (1) tests in English measure similar, but to a certain extent unique, aspects of English achievement; (2) at least one verbal and one possibly non-verbal reasoning factor are involved in the Cooperative General Culture Test; (3) intercorrelations between science and mathematics respectively and other sections of the General Culture Test tend to be smaller for men than for women.—*H. Beaumont* (Kentucky).

2383. **Ryans, D. G., & Peters, E. F.** School satisfaction among first-year students in a women's college. *Sch. & Soc.*, 1941, 53, 157-159.—23 discriminating items were selected from the Bell School Inventory for use with freshmen at the William Woods College for Women. The scores obtained showed only very low positive correlations with aptitude rating (.08) and academic achievement (.17). The correlation with other measures of adjustment were a little higher. The explanation may be that the inventory does not measure school adjustment in a broad sense but satisfaction with specific elements on college life. The authors propose an analysis of the responses and of their relation to those factors which may affect them.—*M. Lee* (Chicago, Ill.).

2384. **Sandon, F.** The measurement and some determinants of the duration of secondary school life. *Ann. Eugen., Camb.*, 1940, 10, 253-268.—A method based on actuarial calculus is proposed for the recorded experience in the duration of school life and for measuring the average length of school life. The technique is applied to a limited set of data and reveals that probably the chief factors of duration of school life are social status and opportunity for employment, while minor causes are age and academic ability. The importance of further research in the field is pointed out.—*J. W. Dunlap* (Rochester).



2385. Spache, G. Characteristic errors of good and poor spellers. *J. educ. Res.*, 1940, 34, 182-189.—Analysis of spelling errors of 25 average and 25 poor spellers among pupils in the Friends Seminary, New York City, and the Brooklyn Friends School indicate that average spellers make a larger number of errors of a phonetic nature than do the poor spellers and the poor spellers make a larger number of non-phonetic errors than the average spellers.—S. W. Fernberger (Pennsylvania).

2386. Stroud, J. S. Experiments on learning in school situations. *Psychol. Bull.*, 1940, 37, 777-807.—The author presents a selective review of the literature, with emphasis on those studies in school situations which test the results of laboratory investigations. The literature is reviewed under the headings: (1) individual differences, (2) sensory mode of presentation, (3) methods of studying, (4) the effect of examinations, (5) improbability of reading, (6) transfer, (7) motivation, and (8) retention. Closer co-ordination of laboratory and school experiments is recommended. 256 references.—A. W. Melton (Missouri).

2387. Super, D., & Wright, R. From school to work in the depression years. II. *Sch. Rev.*, 1940, 49, 123-130.—This concluding part (see XV: 1982) of a post-school study of the occupational experiences of 3 groups of high school graduates reports a trend toward a lower level of occupational ambitions among the depression and post-depression classes. Vocational aims in these groups were more influenced by opportunity and security, while interest and ability were more prominent among the reasons indicated by the pre-depression graduates. Of the latter, only 5% reported a desire to change their occupational level compared with 30% of the other 2 groups. A smaller percentage of the depression graduates aimed at occupational levels above those of their fathers.—R. C. Strassburger (St. Joseph's College for Women).

2388. Symonds, P. M. Trends in educational research. *J. educ. Res.*, 1941, 34, 300-302.—One difficulty with the development of educational research in America has been the adherence of the underlying psychology to behavioristic and connectionistic points of view. The author advocates the adoption of depth psychology and the utilization of projective methods, such as the Rorschach test.—S. W. Fernberger (Pennsylvania).

2389. Tonsor, C. A. Failure in the Bright School. *High Points*, 1941, 23, 67-70.—The Bright School is restricted to high school students of superior intelligence and achievement. In spite of the severe basis of selection, 20-72% of the students are classified as relative failures (do not work to the level of their own capacity). Interviews with the students indicated that the failures were due to poor work habits, personal reactions to the school situation, and interest in other activities. The attitudes of the teachers indicated a lack of understanding of the problems involved.—G. S. Speer (Central YMCA College).

2390. Veo, L., & Woodward, L. E. Planned social work in the school. *Amer. J. Orthopsychiat.*, 1941, 11, 1-14.—The authors discuss traditional misconceptions, resistances, and organizational encumbrances which have for a long time kept social workers and educators apart. Then they outline certain plans whereby social workers and educators can develop a positive understanding of each others' problems and functions and work out the essentials of a broad social work-school program. In the discussion following the paper, D. M. McKay emphasizes the importance of proceeding slowly in the schools and the job of community and social agency interpretation that a social worker can do in the schools.—R. E. Perl (Jewish Board of Guardians).

2391. Voelker, C. H. Demonstration apparatus to teach natural speech to the deaf. *Amer. Ann. Deaf*, 1940, 85, 500-503.—The author describes methods of adapting a D. C. rectifier and a graphic recording device as a visual aid for deaf pupils in learning intensity and durational variations.—C. V. Hudgins (Clarke School).

2392. Walther, E. C. The use of Chi Square as a method of evaluating teachers' grades. *Sch. & Soc.*, 1941, 53, 219-223.—The author advocates the establishment of a theoretical curve for a given class either on the basis of psychological test scores at entrance or on grades actually earned if the standard set up by them is acceptable, or the use of Starch's curve of distribution for college students. By using the Chi Square technique, it is possible to see how far the distribution of grades given by any instructor deviates from this established curve. If the deviation is greater than 5% (or any agreed on limit) an analysis of such grades may show whether the instructor has too high or too low a standard for poor or for good students, and make possible a correction of excessive divergent tendencies.—M. Lee (Chicago, Ill.).

2393. Ward, W. D., Remmers, H. H., & Schmalzried, N. T. The training of teaching-personality by means of student-ratings. *Sch. & Soc.*, 1941, 53, 189-192.—Using the Purdue Rating Scale, practise teachers in West Liberty High School were rated by their pupils after one month and again at the end of the semester. Ratings by supervisors at the same times had a high correlation with the pupils' ratings (median  $r$  was .87, 15 of the 40 coefficients were over .90). After the first rating the results were discussed with the teachers; of the latter all but one were rated higher the second time, especially in sense of proportion and humor and self reliance and confidence, the average gain being 4.2 scale points. The pupils' ratings showed no relation to their academic standing in the class.—M. Lee (Chicago, Ill.).

2394. Weidemann, C. C. Review of essay test studies. *J. higher Educ.*, 1941, 12, 41-43.—Weidemann first shows the conflicting evidence concerning the consistency of measurement indicated by the objective tests and the unimproved old type essay examinations, and also the question as to whether

they measure the same mental functions. He reports that in order to make the issue sharper, the writers undertook an analysis of the written essay examination into a series of definable types from simple to complex: "what, who, when, which, where; list; outline; describe; contrast; compare; explain; discuss; develop; summarize; evaluate." Under these definitions different teachers could ask the students to use the same pattern in response and could employ the same scoring device. Several brief studies were made which indicated considerable overlap in the mental functions but also that there is some definite difference in the mental functions measured by different types of tests. The authors indicate that there is no point to seeking a high correlation between the improved essay examinations and objective tests since this would mean that they were identical in purpose and attainment. "The issue is rather that of moving toward a low correlation . . . and establishment of a high consistency coefficient of scoring the essay form as well as objective." Such developments would enable the investigation of types of mental functions measured.—R. A. Brotemarkle (Pennsylvania).

2395. Worcester, D. A. The influence of orthoptic training on the reading ability of college freshmen. *J. exp. Educ.*, 1941, 9, 167-174.—The orthoptic instruments used in this study were the Squint Korrektor, the Binocular Synchronizer, and the Stereoscope. Orthoptic training was more effective with those students whose scholastic aptitude was superior to their reading ability, and who manifested certain functional limitations in the visual mechanism. Motivation was a significant factor in obtaining both reading and visual changes by the orthoptic method. The effect of personality was probably important in relation to this factor.—H. W. Karn (Pittsburgh).

2396. Wrenn, C. G., & Crandall, E. B. Behavior ratings and scholarship among college freshmen. *J. educ. Res.*, 1941, 34, 259-264.—345 men and 193 women entering Stanford University in 1933 were studied. 2 intimates (one of whom was a secondary school teacher or administrator) indicated on a 10-point modified form of the American Council Rating Scale certain personality characteristics. The scale was concerned with: (1) appearance and manner, (2) work habits, (3) leadership, (4) emotional control, and (5) the existence of a definite program for the distribution of the student's time and energy. The scores were compared with scores made on the Stanford College Aptitude Tests, the Bernreuter Personality Inventory, and freshman grades. Items 2 and 5 show a definite correlation with scholarship, item 5 predicting freshman grades as well as does the College Aptitude Test. No significant relationship was found between any of the 5 items and the Bernreuter Personality Inventory.—S. W. Fernberger (Pennsylvania).

[See also abstracts 2052, 2059, 2063, 2070, 2255, 2259, 2337, 2399, 2426, 2432.]

MENTAL TESTS

2397. Cattell, P. The measurement of intelligence of infants and young children. New York: Psychological Corporation, 1940. Pp. 274. \$3.00.—This book describes a new intelligence scale for young children from two to thirty months of age. It was planned so as to eliminate as many defects of early childhood scales as possible. It is based to a certain extent upon Gesell tests, but many of the Gesell items were modified to make them objective or to make them fit the age scale. Directions for giving and scoring all items were rewritten and objectified. The scale is constructed so as to dovetail with Form L of the Stanford-Binet and constitute a downward extension of it. Stanford-Binet items are intermingled with other items from the ages of 22 to 30 months. Chapter 2 presents a statistical evaluation of the standardization of the tests which is based in part on 1346 examinations made on 274 children at the ages of 3, 6, 9, 12, 18, 24, 30, and 36 months. Chapter 3 deals with general instructions for administering the tests. Chapter 4 presents in concise form the instructions for administering and scoring all items. This section is liberally illustrated, showing material comprising the tests and children responding to various tests. For each of the age levels (2-12, 14, 16, 18, 20, 22, 24, 27, and 30 months) there are 5 test items and in most instances 2 alternates.—D. B. Lindsley (Brown).

2398. Ebert, E. H. A comparison of the original and revised Stanford-Binet scales. *J. Psychol.*, 1941, 11, 47-61.—A group of 315 children of superior social and economic status, ages 5 through 10, were selected to compare performance on the original and revised Stanford-Binet test. No child had been given fewer than 3 consecutive yearly tests and some as many as 6. It was found that at age 6 fairly comparable results from both tests were obtained, but at ages 7, 8, and 9 there was an increasing discrepancy between the IQ's given by the two scales. "For IQ levels below 100 the 1937 revision tends to give slightly lower IQ's than does the 1916 revision. For IQ levels above 100 the new revision tends to give higher results. The higher the IQ level, the greater the discrepancy between the IQ's on the two scales." With the 1937 revision there was a tendency for IQ to increase with age for both dull and bright children, whereas the 1916 scale showed a tendency for the duller individuals to gain and the brighter to lose in IQ scores. The 1937 revision gave higher year to year correlations with repetition than the 1916 test.—F. A. Mote, Jr. (Connecticut).

2399. Traxler, A. E. Stability of scores on the Primary Mental-Abilities Tests. *Sch. & Soc.*, 1941, 53, 255-256.—The Primary Mental-Abilities Tests have admittedly high reliability as indicated by the Spearman Brown split-half correlations. This is sometimes attributed in part to the element of speed in all parts of the test. There is as yet little data on test-retest correlations. In one private

secondary school scores are available of 104 pupils in grades 9-12 who took the entire test two successive years. The correlations range from .578 to .917 except for the perception test in one grade (.210). The highest agreement was found in the number, verbal, and spacial factors. These correlations were all over .80 which is fairly adequate for guidance and prediction. The other factors are about as stable as most aptitude or achievement tests over a year's period.—*M. Lee* (Chicago, Ill.).

2400. Wallin, J. E. W. The results of multiple Binet retestings of the same subjects: the educational implications of variation of test performance. *J. genet. Psychol.*, 1940, 57, 345-391.—One examiner administered the 1916 Stanford-Binet semi-annually 27 times to one subject and 26 times to her sister, 4 yrs. 3 mos. younger. Less regularly the Seguin form board, Healy's A and B-boards, Wallin peg boards and anthropometric measures were also used. Included in the data are detailed recorded observations covering such items as crawling, sitting, walking, dentition and illnesses during the first few years of life. Analysis of Binet scores revealed fluctuations of as much as 27 points from lowest to highest IQ, differences as great as 12 points between successive semi-annual IQ's. The fluctuations can be partly accounted for on the basis of (1) scoring of borderline responses, (2) variation in range of testing, (3) inadvertent omission of tests, (4) illness and injury, and to that extent any single IQ may be misleading. It is suggested that corroborative test and case study material ought regularly to be sought, and school teachers freed from fallacious notions of IQ-perfection, so that the child may always receive the benefit of the doubt.—*D. K. Spelt* (Mississippi).

[See also abstracts 2145, 2374.]

#### CHILDHOOD AND ADOLESCENCE

2401. Ames, L. B. The constancy of psychomotor tempo in individual infants. *J. genet. Psychol.*, 1940, 57, 445-450.—Cinemanalysis of manual and locomotor behavior of 8 infants indicated that speed of movement remains nearly constant over a period of months. When the subjects were ranked according to speed, only 2 varied in position.—*D. K. Spelt* (Mississippi).

2402. Anderson, H. H. Adjustment in the family situation. *Rev. educ. Res.*, 1940, 10, 414-420.—The literature is reviewed under the following headings: marital relations and adult personal adjustments, family background and child adjustment, home background and adjustment in school, foster homes, family care, home factors and delinquency. The bibliography includes 154 titles.—*M. Keller* (Butler Hospital).

2403. [Anon.] Ophthalmic development in infants. *Arch. Ophthalmol.*, Chicago, 1941, 25, 360-361.—A 5-paragraph résumé.—*M. R. Stoll* (American Optical Company).

2404. Bennett, C. C. Problem children, delinquency, and treatment. *Rev. educ. Res.*, 1940, 10,

440-449.—This is a review of the literature for the period from 1936 to July, 1940. Topical headings are: incidence of children's problems, classification of children's problems, attributes of the problem child, the background of problem children, techniques of measurement, the child guidance clinic, juvenile court, institutional treatment, foster home treatment, treatment in social groups, psychotherapy, outcomes of treatment. The bibliography lists 151 titles.—*M. Keller* (Butler Hospital).

2405. Blanchard, P. The interpretation of psychological tests in clinical work with children. *Ment. Hyg.*, N. Y., 1941, 25, 58-75.—Psychological test results are affected not only by the personality and emotional state of the child, but also by the personality and the experience of the psychologist. Some very low scores on intelligence tests are properly attributable to Burnham's pseudo-feeble-mindedness or Anna Freud's neurotic inhibitions with restriction of ego activities. Caution in the use of psychological test results is necessary in both diagnosis and prognosis.—*W. L. Wilkins* (Milwaukee, Wis.).

2406. Bridgman, O. Personality difficulties in children with organic brain defect. *Trans. Amer. neurol. Ass.*, 1940, 66, 108-111.—Abstract and discussion.

2407. Bruch, H. Obesity in childhood: III. Physiologic and psychologic aspects of the food intake of obese children. *Amer. J. Dis. Child.*, 1940, 59, 739-781.—Information concerning the eating habits of 136 obese children was obtained. The families of 80% of the children recognized that the food intake was larger than average. The emotional development of 40 of the children and of the mothers was studied in detail. The majority of the children had been exposed to prolonged over-protection, and they exhibited signs of immature behavior not only in their eating habits but also in other respects. The over-protection is believed to be related to the position of the child in the family, since 35% of the children were only children and another 35% were the youngest in the families. Some factors which helped to shape the maternal attitude are discussed. In all instances the offering and receiving of food represents an important emotional tie in the mother-child relation.—*L. Long* (Hunter).

2408. Carr, L. J. First comprehensive report; the Michigan Child Guidance Institute. Ann Arbor: Michigan Child Guidance Institute, 1941. Pp. 95.—This report, addressed to the Governor of Michigan, covers the period November 1, 1937 to December 1, 1940. Part I, lists 8 recommendations "for the more effective control of juvenile delinquency and other forms of child maladjustment in Michigan." Parts II, III, and IV, defending the home front, juvenile delinquency in Michigan, and "Who is delinquent and why?" give statistics and an analysis of cases. Part V, the institute, organization and activities; Part VI, costs of operations; and Part VII, conclusions and final recommendations, complete the



report. An appendix gives statistics on cases and activities of the staff and an exposition of the functions of the director.—S. G. Dulsky (Rochester Guidance Center).

2409. Curran, F. J., & Schilder, P. A constructive approach to the problems of childhood and adolescence. *J. crim. Psychopath.*, 1940-1941, 2, 125-142; 305-320.—"This paper attempts to describe a survey of the various types of individual and group activities being utilized in the Children's and Adolescents' Wards of Bellevue Psychiatric Hospital. Detailed descriptions are given of organic problems, emotional problems, problems of the group, and the diverse forms of treatment utilized in the hospital. We have tried to demonstrate the correlation between the various theories of causation of emotional disorders and the treatment of the problems, because theory and practise should go hand in hand. There should be a close relationship of individual to group treatment. Group therapy in the form of puppet projects, art projects and dramatic activities allow free expression of aggression or affection. Supervised play and shop work are a means of expression of aggression or affection. Opportunities for group experiences of rhythmic patterns in perceptual motor and emotional fields are provided by the dancing and music classes. Group discussions provide relief from the child's fears and anxieties by the sharing of mutual experiences and by the conviction of social approval. Intensive individual treatment, where it is indicated, progresses more rapidly on the background of organized group interest."—A. Chapanis (Yale).

2410. Freeman, F. N. Cooperative research with adequate support. *J. educ. Res.*, 1941, 34, 321-326.—A plea is made for cooperative research, especially on mental growth and the effects of heredity and environment. For both problems long-time follow-up studies are needed. The author suggests that identical twins placed for adoption in selected homes, contrasting in specified respects, should be studied for not less than 15 years.—S. W. Fernberger (Pennsylvania).

2411. Friedman, H. L., & Meyer, B. Treatment of the adolescent in family case work. *Family*, 1941, 22, 20-26.—Problems faced by the family case worker in dealing with normal adolescents are discussed. Through reporting two extensive case histories, the following generalizations emerge: "The worker's attitude is of more importance than what she actually says." She must strive for consistency, "especially in the face of the adolescent's inconsistency and changability." The adolescent's tendency to imitate may be used by the worker to offer acceptable standards of ethics, thus helping to solve the conflict between super-ego and id. Avenues of sublimation must be provided in terms of needs of the particular individual, and should not be presented in a haphazard manner. Relief-giving must be handled tactfully, since the adolescent may be acutely embarrassed by his newly felt lack of money. Sex education can be given effectively,

for the case worker is often the only person with whom the adolescent can talk naturally on this subject.—A. Thomsen (Syracuse).

2412. Gesell, A. Wolf child and human child. New York: Harper, 1941. Pp. xvi + 107. \$2.00.—This is an interpretative account of the life of a Hindu child taken by wolves, at a few months of age, raised in their den without human contact until about 8, from then in an orphanage until her death at 17. The evidence comes from photographs (10 presented) and a diary. "The diary strikes me as being a notable human document. It is intimate and graphic; it bears internal evidence of sincerity and veracity." For 3 months after capture "there was complete absence of social approach and almost complete shunning of everything human." Prone progression was either on hands and knees or on hands and feet. She finally learned to walk upright, but never to run except on all fours. She ate a dead chicken, and captured and ate a live fowl. By 15 she "was sufficiently normal to be taken for granted." Her vocabulary was 45 words. She could assume responsibilities. Evidence strongly suggests that she was born normal, that she suffered no illness or injury which destroyed normal potentialities of brain development. The chapter on heredity and culture discusses modification of physique due to abnormal environment, dismisses the possibility of psychopathy, and presents the bearing of the case on the nature-nurture controversy. There is no discussion of sexual development and no index.—A. Thomsen (Syracuse).

2413. Hertz, M. R., & Baker, E. Personality changes in adolescence. *Rorschach Res. Exch.*, 1941, 5, 30.—Abstract.

2414. Jouon, H. Déséquilibres graves du caractère chez les adolescents. (Serious character disturbances in adolescents.) Paris: (Dissertation), 1939. Pp. 85.

2415. Kanner, L. Cultural implications of children's behavior problems. *Trans. Amer. neurol. Ass.*, 1940, 66, 103-108.—Abstract and discussion.

2416. Karlin, I. W., Youtz, A. C., & Kennedy, L. Distorted speech in young children. *Amer. J. Dis. Child*, 1940, 59, 1203-1218.—9 children who presented a speech defect with no obvious physical cause were studied. 6 of the 9 were matched individually with a normal child of the same age, sex, and IQ level. All children were given physical, psychological, and audiometric tests. Compared with the control group, the children with speech defects showed retardation in their ability to do tasks requiring motor speed. The control group was inferior in tasks requiring the organization of visually attractive material when given unlimited time. The children with speech defects showed more loss of hearing than did the control group. The following factors were found associated with dyslalia: hearing loss, lack of motor speed, endocrine dysfunction, and unfavorable environmental relation.—L. Long (Hunter).

2417. Klopfer, B., & Margulies, H. Rorschach reactions in early childhood. *Rorschach Res. Exch.*, 1941, 5, 1-23.—This report is based on 205 records of 155 children 2-7 years old, collected by various workers in different institutions. Groups at each year-level were small, the largest being the 4 year group, with 67 subjects. No attempt was made to equate for intelligence or socio-economic status. Patterns of reaction consisted of magic repetition, rejection, and perseveration in the first phase, and a variety of responses after age three years. Each succeeding age group shows a rise in number of responses and a drop in number of rejections. The percentage of children using only the *W* response decreases with age. The percentage of children using the major determinants increases consistently with age for *M*, *FM*, and *CF*. The picture is less clear for *m*, *C*, and *FC*. Occasional use of any of the six shading responses was found at all age levels.—R. Horowitz (New York City).

2418. Kunitz, A. Are talented children good athletes? *High Points*, 1941, 23, 55-59.—Musically or artistically talented high school boys have a ready ability to translate visual imagery into kinesthetic motion, superior intelligence, interest, and enthusiasm. They are able to acquire general athletic proficiency and individual skills in less time, and with less practice, than the average.—G. S. Speer (Central YMCA College).

2419. Long, L. Conceptual relationships in children: the concept of roundness. *J. genet. Psychol.*, 1940, 57, 289-315.—13 children, 3-6 yr. 3 mon. old, learned to press the glass windows of a discrimination apparatus to indicate choices; correct responses were rewarded by candy delivered automatically from the apparatus. Spherical, cylindrical and 2-dimensional figures of different colors and materials, were presented with various non-round figures. All S's gave evidence of the establishment of a roundness concept. In 11 cases this concept included spherical figures and the rounder of a pair of non-round, 2-dimensional figures; but the percentage of correct responses dropped with each departure from spherical objects.—D. K. Spelt (Mississippi).

2420. Manney, G. C. Some psychological problems of the crippled. II. *Crippled Child*, 1941, 18, 127-128.—For the elimination of self-pity and self-consciousness the creation of new interests and the development of positive attitudes is important.—G. S. Speer (Central YMCA College).

2421. Paulsen, A. Rorschachs of school beginners. *Rorschach Res. Exch.*, 1941, 5, 24-29.—Rorschach protocols were taken from 82 children, 47 girls and 35 boys, ranging in age from 5 years, 11 months, to 7 years, 5 months. The Revised Stanford-Binet, Form M, the Goodenough Drawing, and achievement tests were also given. The IQ distribution of this sample followed the normal curve. Typical answers to each of the cards are presented. The findings include the following: a majority showing extraversion trends, girls showing more color

response, boys showing more movement response, boys giving more whole answers than girls. Factors most closely associated with the Binet test results were quality of wholes, number of *M*, *FM*, and *FC*, number of human responses, number of *P* responses, the *F%* and the *F+%*. The author concludes that the response at this age is qualitatively so different from that of the 10 year old that the usual criteria for differentiating between the pathological and normal cannot be taken too literally.—R. Horowitz (New York City).

2422. Phillips, G. E. The constancy of the intelligence quotient in subnormal children. *Aust. Coun. educ. Res. Ser.*, 1940, No. 60. Pp. 86.—Chapter 1 of this monograph reviews the literature on the constancy of the IQ and outlines conditions which must be controlled in such studies. Chapter 2 deals with the variations of IQ found in 365 subnormal children (initial IQ's ranging from 43 to 85) on retesting from 2 to 9 times at varying intervals during attendance in a special school. The initial test was given before entering the special school; the same test (Australian standardization of Binet) and tester were involved throughout. The results show that there was a steadily increasing mean loss in IQ ranging from 1.1 on retesting during the first year to 5.8 during the sixth year. The mean change of IQ on retest for all intervening intervals of time were significant and consistently in a negative direction. Correlation coefficients between tests after varying intervals showed a steady decline for boys (.95 in first year to .71 after sixth year) and a similar decline for girls. In chapter 3 the decrease in IQ is attributed to a decrease in mental growth with age, and the early attainment of mental maturity. Chapter 4 points out that different types of mental growth and emotionality account in the main for the lack of constancy of the IQ, chapter 5 lists 22 conclusions, and chapter 6 deals with the interpretation of a Binet score.—D. B. Lindsley (Brown).

2423. Philp, A. J. Strangers and friends as competitors and co-operators. *J. genet. Psychol.*, 1940, 57, 249-258.—18 kindergarten children worked in pairs, sometimes with strangers, sometimes with friends, at dropping marbles through small holes in boxes. Rewards were given to the more successful member of the pair (competitive task) or to both members of the pair if output was adequate (co-operative task). The kind of pairing did not affect mean scores or variability, but "stranger" pairs were quieter and usually preferred competitive to co-operative tasks.—D. K. Spelt (Mississippi).

2424. Read, K. H. Factors affecting agreement in teachers' behavior ratings of nursery school children. *J. exp. Educ.*, 1940, 9, 133-138.—Nursery school children were rated on a form of the Conrad Behavior Inventory which consisted of 67 items of behavior selected as most significant by a group of teachers and clinicians. The factors which appeared to influence the agreement of the judges included the extent to which: (1) the trait involved

direct overt expression, (2) the relationship with the rater was involved, (3) the rater's attention was likely to be directed toward the behavior, (4) the rater was able to recognize the manifestation of the behavior, and (5) the child's behavior in respect to the trait was likely to vary.—H. W. Karn (Pittsburgh).

2425. Richards, T. W. Factors in the personality of nursery school children. *J. exp. Educ.*, 1940, 9, 152-153.—From a table of intercorrelations between rating scales of the Merrill-Palmer Personality series the author applied Thurstone's centroid method in order to determine the factor pattern. Three significant factors emerged. In naming the factors 8 judges were presented with the scale names and their factor loadings. A large number of trait names resulted, but there was sufficient continuity to call the traits self-sufficiency, conformity, and likeableness.—H. W. Karn (Pittsburgh).

2426. Smith, M. E. A comparison of the English vocabulary used by children of non-American ancestry in Hawaii before they reach the age of seven years with that of kindergarten children in continental United States. *J. exp. Educ.*, 1940, 9, 121-132.—". . . marked differences are found as to the particular words occurring in the vocabularies of children of Portuguese and non-Caucasian ancestry in Hawaii and of kindergarten attendants on the Mainland. These differences are shown to be due to the English dialect or pidgin English prevalent in the Islands, the use of words from languages other than English, differences in climate and environment, differences in the settings in which the records were made and in the comparative maturity in the use of language of the groups studied."—H. W. Karn (Pittsburgh).

2427. Spoerl, D. T. The drawing ability of mentally retarded children. *J. genet. Psychol.*, 1940, 57, 259-277.—30 retarded and 6 normal children made 474 drawings (1) to illustrate stories, (2) when drawing from free choice, (3) in response to such instructions as "what you did yesterday," (4) in copying other pictures. Analysis of these drawings showed that not only did drawing ability increase somewhat with MA, but retarded children drew somewhat better than normal children of the same MA. Characteristics of the drawings of retarded children are described, together with the various techniques employed in evaluating the material.—D. K. Spelt (Mississippi).

2428. Spoerl, D. T. A note on the Anastasi-Foley cultural interpretation of children's drawings. *J. soc. Psychol.*, 1941, 13, 187-192.—The Anastasi-Foley conclusion that "both the subject-matter and the technique of the drawings reflect specific cultural and experiential factors rather than age differences or developmental stages" is invalid because developmental stages involve mental ages, which were not known; because the age at which the one really distinguishing feature (stylization) was found is the age at which formal art replaces drawing as language; because the sex differences in the realistic drawings

are similar to those found among four-to-eight-year-olds in our own culture; and because depiction of the trajectory is common in France, Germany, and the United States, where the population is not accustomed to hunting.—G. Brighouse (Occidental).

2429. Stott, L. H. Adolescents' dislikes regarding parental behavior and their significance. *J. genet. Psychol.*, 1940, 57, 393-414.—649 farm, 639 small town, and 545 city adolescents of both sexes answered 2 questionnaire items on parental behavior which they disliked. 35.9% of the group criticized the mother, 36.2% criticized the father. Girls criticized more often than boys, small town subjects more than farm or city subjects. Significant correlations between criticism and personality scores of the adolescents ranged from  $-.20$  to  $-.35$ . The data were analyzed and classified in detail, and parental personal habits (smoking, drinking, swearing) appeared most unpleasant for the adolescents.—D. K. Spelt (Mississippi).

2430. Stott, L. H. Home punishment of adolescents. *J. genet. Psychol.*, 1940, 57, 415-428.—649 farm, 639 small town, and 545 city adolescents answered questionnaire items on the occurrence, cause, and kind of punishment at home. Slightly more than 1/3 of the group reported 75 different reasons for punishment, but 18% of these persons gave no reason or else a nonsensical, trivial one. Getting home late from dates, disobedience, impudence, and neglect of work appeared as the commonest causes, scolding, being kept at home, and slapping the commonest forms of punishment. Mothers did nearly 2/3 of the punishing. It is suggested that rural children may reach adolescence trained to accept parental control more often than urban children.—D. K. Spelt (Mississippi).

2431. Thompson, J. The ability of children of different grade levels to generalize on sorting tests. *J. Psychol.*, 1941, 11, 119-126.—The Weigl Color-Form Test, the BRL Test, modified from Weigl's Sorting Test, and the Vigotsky Test of Concept Formation were administered to 60 children in the first 6 grades of grammar school. "Performance on these tests revealed significant differences between the older and younger children. The older group more frequently formed categories from the objects presented, and stated the generalizations for the categories. The tendency to class objects belonging together in concrete situations, or to see no objects that belonged together, was more characteristic of the younger group." The ability to generalize was found to increase with age within the age range studied.—F. A. Mote, Jr. (Connecticut).

2432. Thorndike, E. L. Gifted children in small cities. *Teach. Coll. Rec.*, 1941, 42, 420-427.—The author discusses various solutions to the problem of providing for the gifted child in communities too small to offer special classes. He suggests providing a room where the gifted child may spend his time more profitably when classroom instruction becomes superfluous. The author proposes another plan whereby the state would establish asylums for the gifted



similar to those for the feeble-minded. Differentiation of instruction for different levels of ability should be extended to those not included in the superior group. The author offers a weighted index of factors to aid in locating cities where the proportion of exceptional IQ's is high.—*L. Birdsall* (College Entrance Exam. Bd.).

2433. **Thorndike, R. L.** *Children's reading interests; a study based on a fictitious annotated titles questionnaire.* New York: Bureau of Publications, Teachers College, Columbia Univ., 1941. Pp. vi + 48. \$0.60.—A questionnaire composed of 88 fictitious titles with annotations was presented to some 3000 pupils ranging in age from 8 to 20, in grades IV-XII. They indicated their interest in the titles by encircling yes, no, or ?. An analysis of the responses suggests the following general conclusions: (1) "Within the same sex, the interest patterns of groups differing by several years in age and/or as much as thirty points in average IQ show a substantial positive correlation. . . . (2) In their pattern of reported reading interests, bright children (median IQ about 123) are most like a group of mentally slower children (median IQ about 92) who are two or three years older than they are. . . . (3) Sex is conspicuously more important than age or intelligence as a determiner of reported interest pattern, at least within the range of age and ability here studied. . . . (4) The acceleration of interest in bright children does not seem to be entirely, or even predominantly a scholarly or bookish precocity." Practical implications from these findings are suggested. An appendix presents the complete questionnaire.—*L. M. McCabe* (Cambridge, Mass.).

2434. **Thorndike, R. L.** *Problems in identification, description, and development of the gifted.* *Teach. Coll. Rec.*, 1941, 42, 402-406.—The gifted child is defined as one who shows "in exceptionally high degree the ability to work with ideas." The author reviews the problems involved in locating the gifted child, in determining his characteristics, and in predicting his future development.—*L. Birdsall* (College Entrance Exam. Bd.).

2435. **Valentiner, H. L.** *The comparative fatigability of normal and mentally deficient children.* *J. abnorm. soc. Psychol.*, 1941, 36, 51-61.—Mentally deficient children are somewhat inferior to normals in muscular strength, as indicated by a weaker hand grip and somewhat lower steadiness, but they are not markedly more susceptible to muscular fatigue resulting from continuous ergographic performance. In mental work, such as color-naming and cancellation, mentally deficient children perform at a somewhat lower level and with less accuracy than do

normal children. The amount and rate of onset of fatigue in such mental work is greater in the mentally deficient, as indicated by a greater decrement in speed and accuracy and a greater accumulation of blocks.—*C. H. Johnson* (Portland, Ore.).

2436. **Valentiner, T.** *Die Arbeit des Instituts für Jugendkunde in Bremen.* (The work of the Bremen Institute for Youth Study.) *Z. pädag. Psychol.*, 1940, 41, 186-192.—This twenty-ninth annual report (1939-40) discusses the activities of the Institute under the headings: recommendations and tests for admission to secondary schools; vocational testing and advice; and youth and population studies. A comparative study of 14-year-olds of 1926-28 with those of 1939-40 proves that the latter are better physical specimens, and that their characters are firmer and more independent. Therefore they need stricter discipline. The scholastic showing is not so good, but doubtless this is a passing weakness due to the present crisis. The German teacher has produced these gratifying results in physique and character by the application of principles received from the Führer. For all well-endowed children, especially of the upper classes, a spartan training is absolutely necessary.—*M. E. Morse* (Baltimore, Md.).

2437. **Wandling, A. R.** *Ten behavior problems common with pre-school children.* New York: House of Field, 1939. Pp. 272. \$2.50.—This book contains selections from some 80 authors on: temper tantrums, fears, negativism, thumb-sucking, stealing, lying, enuresis, jealousy, masturbation, and food problems. Each topic is treated in somewhat similar order: introduction, causes, treatments, examples, conclusion, and summary of causes and treatments. The purpose has been to save the time of busy mothers and teachers and to provide a wide range of reading for those who do not have access to a library. Bibliography.—*L. M. Stolz* (California).

2438. **Weiss-Frankl, A. B.** *Play interviews with nursery school children.* *Amer. J. Orthopsychiat.*, 1941, 11, 33-40.—The author discusses the play interview as a tool in giving a dynamic diagnosis of the child's personality. One gets a live portrait of a developing child and can thus more easily understand what teachers and parents say about the child. The play interview provides a common bases for discussion between worker and parents which facilitates guidance of the parents to use their own experiences with the child in a constructive fashion.—*R. E. Perl* (Jewish Board of Guardians).

[See also abstracts 2063, 2102, 2181, 2226, 2242, 2293, 2301, 2389, 2397, 2420.]

